SOUND LEVEL ASSESSMENT REPORT

Antrim Wind Energy Project
Antrim, NH

Prepared for:

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February 17, 2016

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1.0 INTRODUCTION AND SUMMARY

The Antrim Wind Energy Project (the Project) is a 28.8 megawatt (MW) wind power generation facility proposed for Hillsborough County, New Hampshire. The Project will be entirely within the Town of Antrim, generally located on Tuttle Hill south of NH Route 9. The layout of the project area, including topography, project boundary lines, and participating landowner property lines are shown in Figure 1-1. The wind farm will have nine (9) 3.2 MW Siemens SWT-3.2-113 wind turbines using a hub height of either 92.5 or 79.5 meters, and a rotor diameter of 113 meters.

This sound level assessment included a sound-monitoring program to determine existing sound levels in the vicinity of the Project, computer modeling to predict future sound levels when the wind turbines are operational, and a comparison of the worst-case operational sound levels associated with the wind turbines to accepted criteria. Every residence is at least 2,600 feet (one-half mile) from the nearest wind turbine. The worst-case sound levels will be less than 40 dBA at any residence. There are no federal or existing local noise regulations that apply to this project. The results of this sound level impact assessment show that the Project will easily comply with recently revised New Hampshire Site Evaluation Committee (SEC) Site 301.14 standards. In addition, the Project meets sound level limits set in decisions on comparable wind turbine projects in Lempster and Groton, NH, as well as community noise guidelines published by the World Health Organization (WHO), and noise guidelines put out by the US Environmental Protection Agency (EPA).

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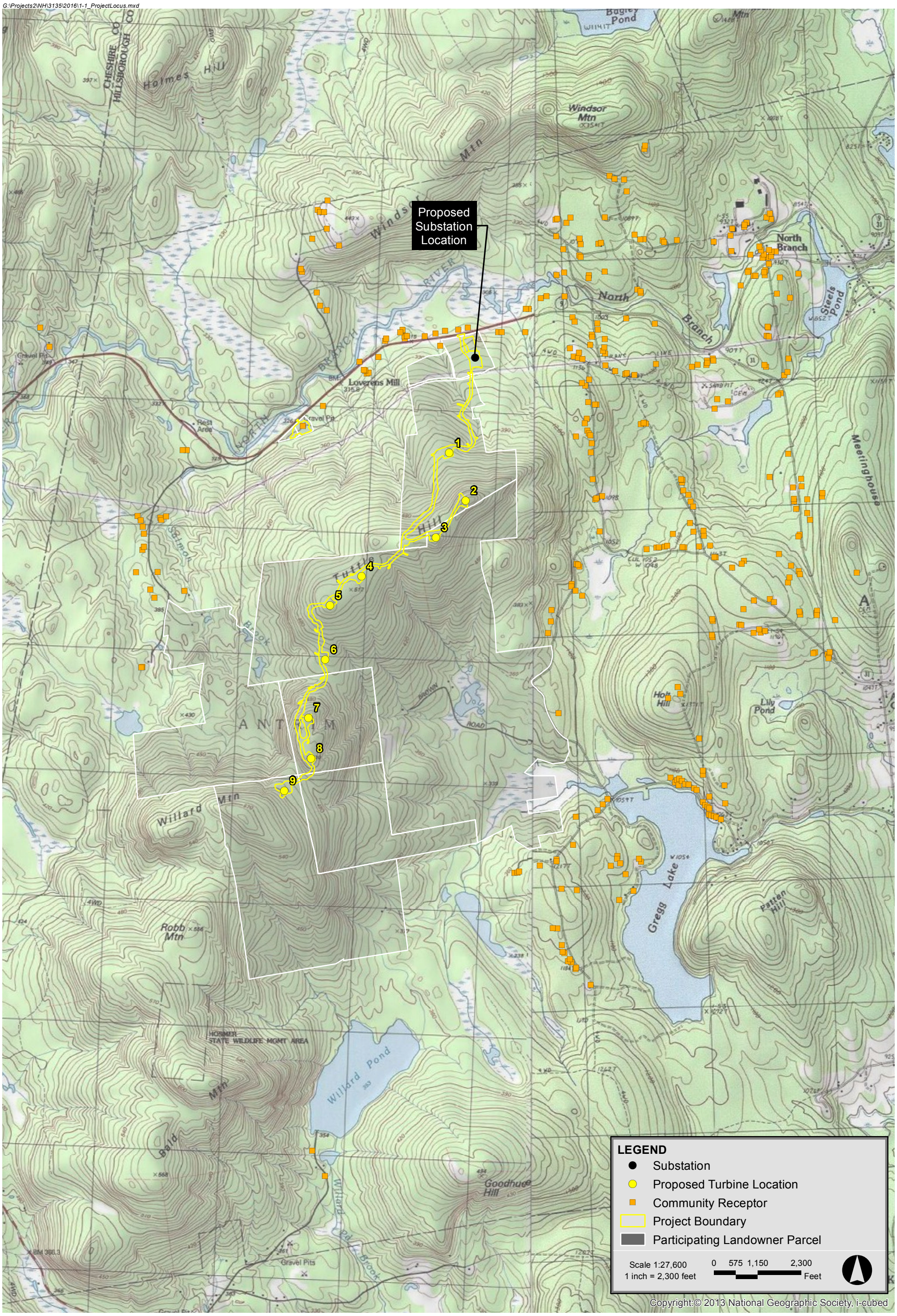

Antrim Wind **Antrim, New Hampshire**

Epsilon ASSOCIATES INC.

Figure 1-1
Project Locus

2.0 SOUND TERMINOLOGY

There are several ways in which sound (noise) levels are measured and quantified. All of them use the logarithmic decibel (dB) scale. The following information defines the noise measurement terminology used in this analysis.

The decibel scale is logarithmic to accommodate the wide range of sound intensities found in the environment. The sound pressure level, L_p, is defined as ten times the common logarithm of the square of the ratio of the sound pressure to the reference sound pressure of 20 micropascals (μPa). Sound pressure level is expressed in decibels and given by the formula below:

$$Lp = 10 \log_{10} \left(\frac{p}{po}\right)^2$$

Where p is the sound pressure, and p_o is the reference sound pressure of 20 μPa.

A property of the decibel scale is that the sound pressure levels of two separate sounds are not directly additive. For example, if a sound of 50 dB is added to another sound of 50 dB, the total is only a three-decibel increase (to 53 dB), not a doubling to 100 dB. Thus, every three dB change in sound levels represents a doubling or halving of sound energy. Related to this is the fact that a change in sound levels of less than three dB is imperceptible to the human ear.

Another property of decibels is that if one source of noise is 10 dB (or more) louder than another source, then the total sound level is simply the sound level of the higher source. For example, a source of sound at 60 dB plus another source of sound at 47 dB is 60 dB.

The sound level meter used to measure noise is a standardized instrument.[1] It contains "weighting networks" to adjust the frequency response of the instrument to approximate that of the human ear under various circumstances. One network is the A-weighting network (there are also B- and C-weighting networks). The A-weighted scale (dBA) most closely approximates how the human ear responds to sound at various frequencies, and is the accepted scale used for community sound level measurements.

Sound waves are composed of energy at various frequencies or cycles per second (Hertz, or "Hz"). An octave band is a frequency band where the highest frequency is twice the lowest frequency. For example, an octave filter with a centre frequency of 1000 Hz has a lower frequency of 707 Hz and an upper frequency of 1414 Hz. Commonly used octave band frequencies are 31.5, 63, 125, 250, 500, 1000, 2000, 4000, and 8000 Hz.

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[1] *American National Standard Electroacoustics -- Sound Level Meters – Part 1: Specifications*, ANSI/ASA S1.4 Part 1 (2014), published by the Standards Secretariat of the Acoustical Society of America, Melville, NY.

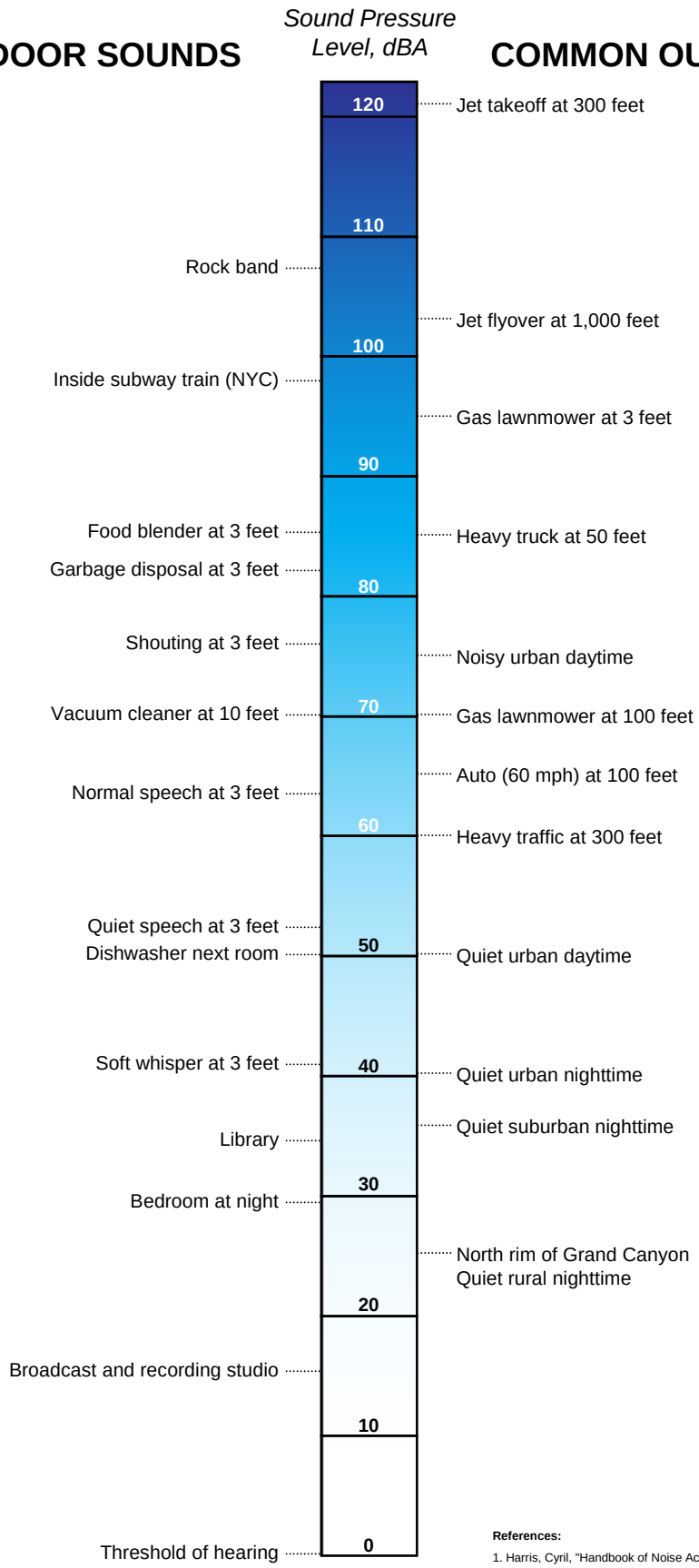
Sounds are frequently reported as detected with the A-weighting network of the sound level meter. A-weighted sound levels emphasize the middle frequency (*i.e.,* middle pitched – around 1,000 Hertz sounds), and de-emphasize lower and higher frequency sounds which are less perceptible to the human ear.

A-weighted sound levels are reported in decibels designated as "dBA." Sound pressure levels for some common indoor and outdoor environments are shown in Figure 2-1.

Because the sounds in our environment vary with time they cannot simply be described with a single number. Two methods are used for describing variable sounds. These are exceedance levels and the equivalent level, both of which are derived from a large number of moment-to-moment A-weighted sound level measurements. Exceedance levels are values from the cumulative amplitude distribution of all of the sound levels observed during a measurement period. Exceedance levels are designated L_n, where n can have a value of 0 to 100 percent. Several sound level metrics that are commonly reported in community noise monitoring are described below.

- L_{90} is the sound level in dBA exceeded 90 percent of the time during the measurement period. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent noise sources.

- L_{eq}, the equivalent level, is the level of a hypothetical steady sound that would have the same energy (*i.e.,* the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is also A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by occasional loud noises.



References:

1. Harris, Cyril, "Handbook of Noise Acoustical Measurements and Noise Control", p 1-10., 1998
2. "Controlling Noise", USAF, AFMC, AFDTC, Elgin AFB, Fact Sheet, August 1996
3. California Dept. of Trans., "Technical Noise Supplement", Oct, 1998

Figure 2-1

Common Indoor and Outdoor Sound Levels

3.0 NOISE REGULATIONS

3.1 Federal Regulations

There are no federal community noise regulations applicable to wind farms.

3.2 New Hampshire State Regulations

The New Hampshire Site Evaluation Committee through rulemaking docket 2014-04 adopted rules on December 15, 2015 outlining application requirements and criteria for energy facilities, including wind energy facilities. As part of these revised regulations, Site 301.14(f)(2)a. contains wind energy facility sound standards which state the following:

> *With respect to sound standards, the A-weighted equivalent sound levels produced by the applicant's energy facility during operations shall not exceed the greater of 45 dBA or 5 dBA above background levels, measured at the L-90 sound level, between the hours of 8:00 a.m. and 8:00 p.m. each day, and the greater of 40 dBA or 5 dBA above background levels, measured at the L-90 sound level, at all other times during each day, as measured using microphone placement at least 7.5 meters from any surface where reflections may influence measured sound pressure levels, on property that is used in whole or in part for permanent or temporary residential purposes, at a location between the nearest building on the property used for such purposes and the closest wind turbine."*

The new SEC rules also contain requirements for preconstruction background sound assessments and project related sound modeling, which this study has adhered to.

For historical reference, in the past, the New Hampshire SEC has considered the sound levels associated with a wind energy project when evaluating an application for a certificate of site and facility, and imposed conditions. For example, the SEC included several sound-related conditions in its orders approving the Lempster and Groton wind energy projects.[2] Notably, the SEC required that sound from the Lempster project not exceed 45 dBA or 5 dBA above the ambient sound level, whichever is greater, immediately outside the residences of non-participating landowners, and required that sound levels generated by the Groton project not exceed 55 dBA or 5 dBA above ambient, whichever is greater in the day time and 45 dBA or 5 dBA above ambient, whichever is greater in the night time at the outside façades of homes.

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[2] Docket 2006-01, Application of Lempster Wind, LLC, Decision Issuing Certificate of Site and Facility with Conditions at 47-49 (June 28, 2007); Docket 2010-01, Application of Groton Wind, LLC, Decision Issuing Certificate of Site and Facility with Conditions at 80-89 (May 6, 2011).

In Docket 2012-01, the previous Antrim Wind Energy docket, the SEC assessed predicted sound levels and would have imposed conditions pursuant to which sound levels could not exceed a daytime limit of 45 dBA or 5 dBA above ambient, whichever is greater, and a nighttime limit of 40 dBA or 5 dBA above ambient, whichever is greater.[3]

3.3 Local Regulations

There are applicable sound level restrictions in effect as part of the Agreement between the Town of Antrim, NH and Antrim Wind Energy, LLC dated March 8, 2012. Section 11.1 of that Agreement states "sound from the Wind Farm during Operations at the exterior facades of homes shall not exceed 50 dBA or 5 dBA above ambient, whichever is greater during daytime and 45 dBA or 5 dBA above ambient, whichever is greater, at night." In addition, pre-construction sound modeling will be done for the wind farm (Section 11.2), and post-construction compliance noise measurements will be done during both daytime and nighttime hours, as well as during both summer and winter seasons (Section 11.3).

[3] Docket 2012-01, Application of Antrim Wind Energy, LLC, Decision and Order Denying Application for Certificate of Site and Facility at 68-69 (April 25, 2013).

4.0 SOUND FROM WIND TURBINES

A detailed discussion of sound from wind turbines is presented in a white paper prepared by the Renewable Energy Research Laboratory.[4] A few points are repeated herein. Wind turbine noise can originate from two different sources; mechanical sound from the interaction of turbine components, and aerodynamic sound produced by the flow of air over the rotor blades. Prior to the 1990's, both were significant contributors to wind turbine noise. However, modern wind turbine design has greatly reduced the contribution of mechanical noise. Aerodynamic noise has also been reduced from wind turbines due to slower rotational speeds and changes in materials of construction.

Aerodynamic noise, in general, is broadband (i.e., it has contributions from a wide range of frequencies). It originates from encounters of the wind turbine blades with localized airflow inhomogeneities and wakes from other turbine blades and from airflow across the surface of the blades, particularly the front and trailing edges. Aerodynamic sound generally increases with increasing wind speed up to a certain point, then remains constant, even with higher wind speeds. However, sound levels in the environment in general also increase with increasing wind speed with or without the presence of wind turbines.

[4] Renewable Energy Research Laboratory, Department of Mechanical and Industrial Engineering, University of Massachusetts at Amherst, Wind Turbine Acoustic Noise, June 2002, amended January 2006.

5.0 EXISTING SOUND LEVELS

5.1 Overview

The Antrim Project is located at Tuttle Hill in the Town of Antrim, Hillsborough County, New Hampshire, south of Keene Road (Route 9). The wind farm will have nine (9) 3.2-megawatt (MW) Siemens SWT-3.2-113 wind turbines, eight of which will have a hub height of 92.5 meters and one of which will have a hub height of 79.5 meters. All turbines will have a rotor diameter of 113 meters. The coordinates for each wind turbine were provided by Antrim Wind Energy, LLC.

5.2 Sound Level Environment

In accordance with the requirements of SEC rule Site 301.18, an ambient sound level survey was conducted in January 2016 to characterize the current acoustical environment under varying wind conditions in the community. Existing noise sources in the project area include: vehicular traffic on local roads and Route 9 (for some locations), running water, wind noise, rustling vegetation, birds chirping, aircraft, and diesel powered equipment.

The standards specified by the NH SEC as well as those that have been applied to sounds levels from other wind projects in New Hampshire contain both an absolute and a relative standard, as discussed in Section 3.2 of this report. Because the NH SEC noise limit has both an absolute and relative component (e.g., the greater of 45 dBA or 5 dBA above ambient during the day and the greater of 40 dBA or 5 dBA above ambient at night), we performed a background study to inform the upper limit. Thus, if background sound levels were consistently 50 dBA during the day, a project could operate at a maximum limit of 55 dBA under the standard during the daytime. If background sound levels at night were at levels such that those levels plus 5 dBA equals less than the absolute standard (e.g., background levels of 30 dBA plus 5 dBA equals 35 dBA and is less than a 40 dBA nighttime limit) then the absolute standard of 40 dBA applies. Under this type of standard, which is applicable to this Project, measuring the quietest periods during the background ambient sound study will not impact the results, as the lower limit for the project will still be controlled by the absolute component of the standard.

5.3 Sound Level Measurement Locations

The selection of the sound monitoring locations is representative of nearby residences in various directions from the wind farm within a 2-mile radius of any wind turbine. Figure 5-1 shows the proposed wind turbine locations as well as the actual measurement locations overlaid upon an aerial photograph of the surrounding area. Each sound level monitoring location is described below. The coordinates for the sound level measurement locations were obtained by Epsilon staff in the field using a Global Positioning System (GPS) instrument with an accuracy of 3 meters or less. All distances shown are rounded to the nearest 100 feet.

- Location L1 – 354 Keene Road (Route 9)
  - Approximately 3,000 feet to the closest proposed wind turbine (#1). This location is representative of the nearest residents to the north of the wind farm along Route 9.
- Location L2 – 47 Loveren Mill Road
  - Approximately 5,500 feet to the closest proposed wind turbine (#1). This location is representative of the nearest residents to the north of the wind farm along Loveren Mill Road, set far back from traffic on Route 9.
- Location L3 – Salmon Brook Road
  - Approximately 4,200 feet to the closest proposed wind turbine (#5). This location is representative of the nearest residents to the west of the wind farm along Salmon Brook Road.
- Location L4 – 72 Reed Carr Road
  - Approximately 3,600 feet to the closest proposed wind turbine (#1). This location is representative of the nearest residents to the east and northeast of the wind farm along Reed Carr Road and Craig Road.
- Location L5 – Gregg Lake Road
  - Approximately 8,700 feet to the closest proposed wind turbine (#3). This location is representative of the residents to the southeast of the wind farm along Gregg Lake Road to the north of Gregg Lake.

Table 5-1 lists the GPS coordinates for the five sound level measurement locations. The five 2-meter meteorological towers were located in the vicinity of these coordinates, which are presented in WGS 1984 format.

Table 5-1 GPS Coordinates – Sound Level Measurement Locations

Location	Latitude	Longitude
Location L1 – Keene Road	43.07559º	-72.00840º
Location L2 – Loveren Mill Road	43.07900º	-72.02130º
Location L3 – Salmon Brook Road	43.05607º	-72.03515º
Location L4 – Reed Carr Road	43.07008º	-71.99502º
Location L5 – Gregg Lake Road	43.04301º	-71.98839º

5.4 Sound Measurement Methodology

A comprehensive sound level measurement program was developed to quantify the ambient sound levels around the wind farm. Over two weeks of ambient sound level measurements were taken from Thursday, January 7 through Friday, January 22, 2016. Measurement procedures were consistent with the preconstruction background sound study methodology specified in NH SEC Site 301.18(a). Continuous sound level measurements and audio recordings were made at all five locations. Ground-level wind speeds were continuously measured and logged within close proximity to the sound level meters at all five locations, with additional meteorological data collected at one location (Location L5). Meteorological data from the nearby Jaffrey Municipal Airport Silver Ranch National Weather Service (NWS) station were also archived for the duration of the measurement period. These data are included in Appendix A.

Sound levels were measured at a height of approximately five feet (1.5 meters) above the ground at locations where there were no large reflective surfaces to affect the measured levels. Field personnel checked on the integrity of the equipment and recorded observations during the first night and day of monitoring, during three interim field visits on January 12th, 15th, and 20th, and during the last day of monitoring. Below is a description of the measurement program for each location.

5.4.1 Location L1 – Keene Road (Route 9)

One continuous programmable unattended sound level meter was placed on the side of the driveway at #354 Keene Road approximately 130 feet back from the street, and 50 feet from the edge of the woods. This setback is comparable to those of nearby houses due west along Keene Road. This meter continuously measured and stored broadband (A-weighted) and one-third octave band sound level statistics along with audio recordings from 5:00 p.m. Thursday, January 7 until 12:00 p.m. Friday, January 22, for a total of 355 hours. In addition, continuous ground-level wind speed measurements were made at this location, at a height of two meters above ground level (AGL).

5.4.2 Location L2 – Loveren Mill Road

One continuous programmable unattended sound level meter was placed about 25 feet north of the driveway at #47 Loveren Mill Road approximately 60 feet back from the street, and approximately 2,200 feet from Route 9. This meter continuously measured and stored broadband (A-weighted) and one-third octave band sound level statistics along with audio recordings from 3:00 p.m. Thursday, January 7 until 11:00 a.m. Friday, January 22, for a total of 356 hours. In addition, continuous ground-level wind speed measurements were made at this location, at a height of two meters AGL.

5.4.3 Location L3 – Salmon Brook Road

One continuous programmable unattended sound level meter was placed in the woods just south of Salmon Brook Road beyond the driveway at #156. This meter, approximately 125 feet beyond a red metal gate, and 4,300 feet from Route 9, continuously measured and stored broadband (A-weighted) and one-third octave band sound level statistics along with audio recordings from 4:00 p.m. Thursday, January 7 until 10:00 a.m. Friday, January 22, for a total of 354 hours. In addition, continuous ground-level wind speed measurements were made at this location, at a height of two meters AGL.

5.4.4 Location L4 – Reed Carr Road

One continuous programmable unattended sound level meter was placed in the backyard of #72 Reed Carr Road near a garden facing the ridgeline where the proposed turbines will be located. This location is approximately 2,800 feet from Route 9. This meter continuously measured and stored broadband (A-weighted) and one-third octave band sound level statistics along with audio recordings from 1:00 p.m. Thursday, January 7 until 12:00 p.m. Friday, January 22, for a total of 359 hours. In addition, continuous ground-level wind speed measurements were made at this location, at a height of two meters AGL.

5.4.5 Location L5 – Gregg Lake Road

One continuous programmable unattended sound level meter was placed just east of the covered picnic tables at the Antrim Town Beach on Gregg Lake Road. The meter was approximately 240 feet south of Gregg Lake Road. This meter continuously measured and stored broadband (A-weighted) and one-third octave band sound level statistics along with audio recordings from 12:00 p.m. Thursday, January 7 until 9:00 a.m. Friday, January 22, for a total of 357 hours. In addition, continuous ground-level wind speed, wind direction, temperature, and precipitation measurements were made at this location, at a height of two meters AGL.

5.5 Sound Level Measurement Equipment

Five Larson-Davis (LD) model 831 sound level meters, equipped with an LD 831PRM preamplifier, a PCB 377B20 half-inch microphone, and an environmental protection kit were used to collect continuous A-weighted (dBA) and one-third octave band ambient sound pressure level data at Locations L1, L2, L3, L4, and L5. Part of the environmental protection kit included a suitable windscreen to reduce wind-induced noise over the microphone. Each meter was tripod-mounted at a height of five feet above ground and set to log data every hour along with a one-minute time history ("fast" response). Audio recordings were collected with Roland R-05 Recorders connected to each LD831 sound level meter.

All meters meet Type 1 ANSI/ASA S1.4 Part 1 (2014) standards for sound level meters and were calibrated and certified as accurate to standards set by the National Institute of Standards and Technology. These calibrations were conducted by an independent laboratory within 12 months of being put into the field. Each meter has data logging capability and was programmed to log statistical data every ten minutes for the following parameters: L_1, L_{10}, L_{50}, L_{90}, L_{max}, L_{min}, and L_{eq}. The LD 831 sound level meters, and their respective microphones, are compliant with IEC 61672 standards. All measurement equipment was calibrated in the field before, during, and after the surveys with the manufacturer's acoustical calibrator which meets the standards of IEC 60942-2003 Class 1L and ANSI/ASA S1.40-2006 (R2011).

5.6 Measured Sound Levels

A brief summary of the measured sound levels and noise sources from each location is provided below. Several weather events were notable during the 15-day measurement program, including 23 periods of precipitation. These periods were excluded from the analysis, along with any periods with ground-level wind speeds greater than 4 m/s which occurred only at Location L5 for a total of 56 periods. There were no temperatures measured below the instrumentation minima to be excluded. The resulting dataset included a total of 276 to 333 hours of valid data, depending on location. The broadband A-weighted (dBA) and C-weighted (dBC) minimum, maximum, average and median background sound levels for each location are summarized in Tables 5-2 (L_{eq}) , 5-3 (L_{10}) and 5-4 (L_{90}).

5.6.1 Location L1 – Keene Road (Route 9)

Sound levels at the L1 monitor were influenced by vehicular traffic on Route 9, water noise, and rustling vegetation. The range of measured A-weighted and C-weighted sound levels are summarized below, and presented graphically in Figures B-1 and B-2 of Appendix B, respectively. The diurnal fluctuations in sound level (L_{10} and L_{eq}) are very apparent at this location, driven mainly by engine and tire noise from traffic on Route 9, with a range of about 10 dBA between daytime and nighttime hours.

- The steady-state (L_{90}) measurements ranged from 18 to 53 dBA and 28 to 58 dBC;
- The L_{10} measurements ranged from 29 to 67 dBA and 39 to 73 dBC;
- The equivalent level (L_{eq}) measurements ranged from 43 to 62 dBA and 46 to 69 dBC.

5.6.2 Location L2 - Loveren Mill Road

Sound levels at the L2 monitor were influenced by traffic noise along Route 9, diesel powered equipment, dogs barking, birds chirping, water noise, wind noise, and rustling vegetation. The sound levels at this location correlate closely with ground level wind speed. The range of measured A-weighted and C-weighted sound levels are summarized below, and presented graphically in Figures B-3 and B-4 of Appendix B, respectively.

- The steady-state (L_{90}) measurements ranged from 15 to 49 dBA and 27 to 57 dBC;
- The L_{10} measurements ranged from 19 to 70 dBA and 35 to 74 dBC;
- The equivalent level (L_{eq}) measurements ranged from 19 to 64 dBA and 32 to 69 dBC.

The L_{eq} of 64 dBA was likely caused by a passing vehicle. More typical L_{eq} values were from about 25 to 55 dBA.

5.6.3 Location L3 – Salmon Brook Road

Sound levels at the L3 monitor were influenced by traffic noise along Route 9, water noise, wind noise, and rustling vegetation. The range of measured A-weighted and C-weighted sound levels are summarized below, and presented graphically in Figures B-5 and B-6 of Appendix B, respectively. The sound levels at this location are primarily controlled by typical forest sources including water noise and bird calls.

- The steady-state (L_{90}) measurements ranged from 16 to 49 dBA and 26 to 55 dBC;
- The L_{10} measurements ranged from 20 to 58 dBA and 32 to 64 dBC;
- The equivalent level (L_{eq}) measurements ranged from 18 to 55 dBA and 30 to 61 dBC.

5.6.4 Location L4 – Reed Carr Road

Sound levels at the L4 monitor were influenced by distant vehicles passing on Reed Carr Road, aircraft, birds chirping, distant diesel powered equipment, wind noise, and rustling vegetation. The sound levels at this location correlate closely with ground level wind speed. The range of measured A-weighted and C-weighted sound levels are summarized below, and presented graphically in Figures B-7 and B-8 of Appendix B, respectively.

- The steady-state (L_{90}) measurements ranged from 14 to 50 dBA and 26 to 56 dBC;
- The L_{10} measurements ranged from 17 to 58 dBA and 34 to 64 dBC;
- The equivalent level (L_{eq}) measurements ranged from 15 to 55 dBA and 32 to 61 dBC.

5.6.5 Location L5 – Gregg Lake Road

Sound levels at the L5 monitor were influenced by traffic on Gregg Lake Road, water noise, wind noise, and guns shooting. The sound levels at this location correlate closely with ground level wind speed. The range of measured A-weighted and C-weighted sound levels are summarized below, and presented graphically in Figures B-9 and B-10 of Appendix B, respectively.

- The steady-state (L_{90}) measurements ranged from 15 to 45 dBA and 28 to 58 dBC;
- The L_{10} measurements ranged from 16 to 61 dBA and 36 to 78 dBC;
- The equivalent level (L_{eq}) measurements ranged from 17 to 57 dBA and 33 to 75 dBC.

Table 5-2 Ambient Background L_{eq} Sound Levels

Location	Minimum L_{eq}		Maximum L_{eq}		Median L_{eq}		Average L_{eq}	
	dBA	dBC	dBA	dBC	dBA	dBC	dBA	dBC
Location L1 – Keene Road	43	46	62	69	57	61	56	60
Location L2 – Loveren Mill Road	19	32	64	69	39	49	39	49
Location L3 – Salmon Brook Road	18	30	55	61	34	45	35	45
Location L4 – Reed Carr Road	15	32	55	61	35	46	35	46
Location L5 – Gregg Lake Road	17	33	57	75	38	55	38	55

Table 5-3 Ambient Background L_{10} Sound Levels

Location	Minimum L_{10}		Maximum L_{10}		Median L_{10}		Average L_{10}	
	dBA	dBC	dBA	dBC	dBA	dBC	dBA	dBC
Location L1 – Keene Road	29	39	67	73	62	63	58	61
Location L2 – Loveren Mill Road	19	35	70	74	40	50	41	51
Location L3 – Salmon Brook Road	20	32	58	64	36	46	41	47
Location L4 – Reed Carr Road	17	34	58	64	37	48	39	48
Location L5 – Gregg Lake Road	16	36	61	78	40	57	40	58

Table 5-4 Ambient Background L_{90} Sound Levels

Location	Minimum L_{90}		Maximum L_{90}		Median L_{90}		Average L_{90}	
	dBA	dBC	dBA	dBC	dBA	dBC	dBA	dBC
Location L1 – Keene Road	18	28	53	58	36	42	36	42
Location L2 – Loveren Mill Road	15	27	49	57	30	39	30	40
Location L3 – Salmon Brook Road	16	26	49	55	27	37	29	38
Location L4 – Reed Carr Road	14	26	50	56	28	38	28	38
Location L5 – Gregg Lake Road	15	28	45	58	26	41	27	41

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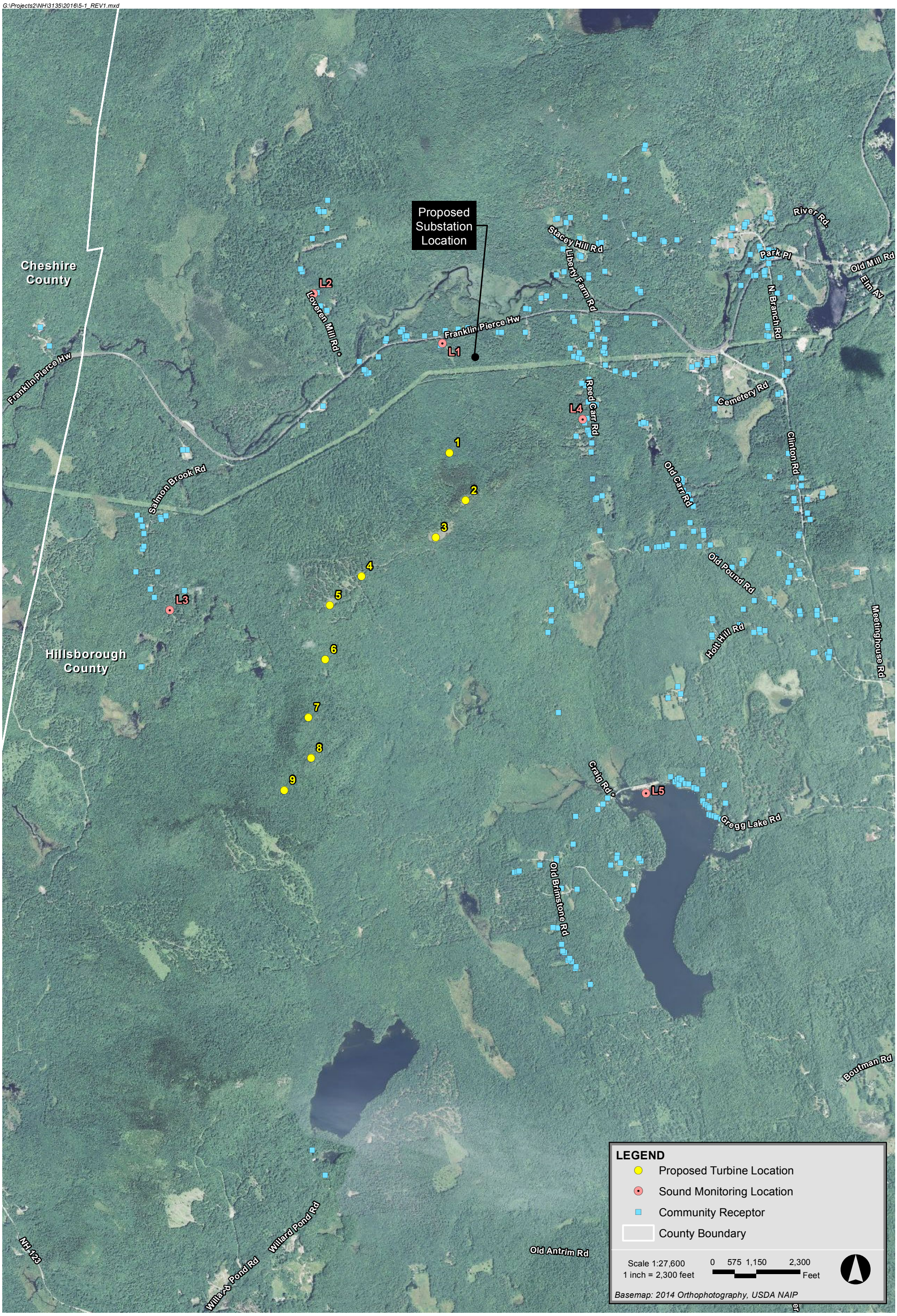


Antrim Wind **Antrim, New Hampshire**

Epsilon ASSOCIATES INC.

Figure 5-1
Aerial Locus

6.0 EXISTING WIND SPEEDS

6.1 Wind Speed Measurement Equipment

Wind speed can have a strong influence on ambient sound levels. In order to understand how the existing sound levels are influenced by wind speed, HOBO H21-002 micro-weather stations (manufactured by Onset Computer Corporation) with tripods and data loggers were used to record continuous wind speed data at each of the five sound level monitoring locations, along with additional wind direction, temperature, and precipitation data at Location L5. The wind sensors were mounted at an approximate height of 6 feet 6 inches (2 meters) above ground level and data were logged every hour. This wind instrument has a measurement range of 0 to 44 m/s (99 mph) and an accuracy of +/- 0.5 m/s (1.1 mph). The starting threshold is 0.5 m/s (1.1 mph). The wind direction measurement range is 0 to 358 degrees (2-degree dead band), with an accuracy of +/- 5 degrees. Figure 6-1 shows a typical setup for the wind measurement equipment deployed at Locations L1 through L4. The 2-meter weather station setup at Location L5 is shown in Figure 6-2.

6.2 Measured Wind Speeds

The continuous ground level (2-meter) wind speeds measured at Locations L1 through L5 are presented in Figures B-1 through B-10 of Appendix B. Continuous wind direction, temperature, and precipitation data recorded at Location L5 are presented in Figure 6-3, below. Overall, ground-level winds were light (below 2 m/s) at Locations L1 through L4. Wind speeds measured at Location L5 were generally higher with a total of 56 hours above 4 m/s. Any sound levels during the hours when wind speeds were above 4 m/s were not included in the analysis per Site 301.18(a)(4).

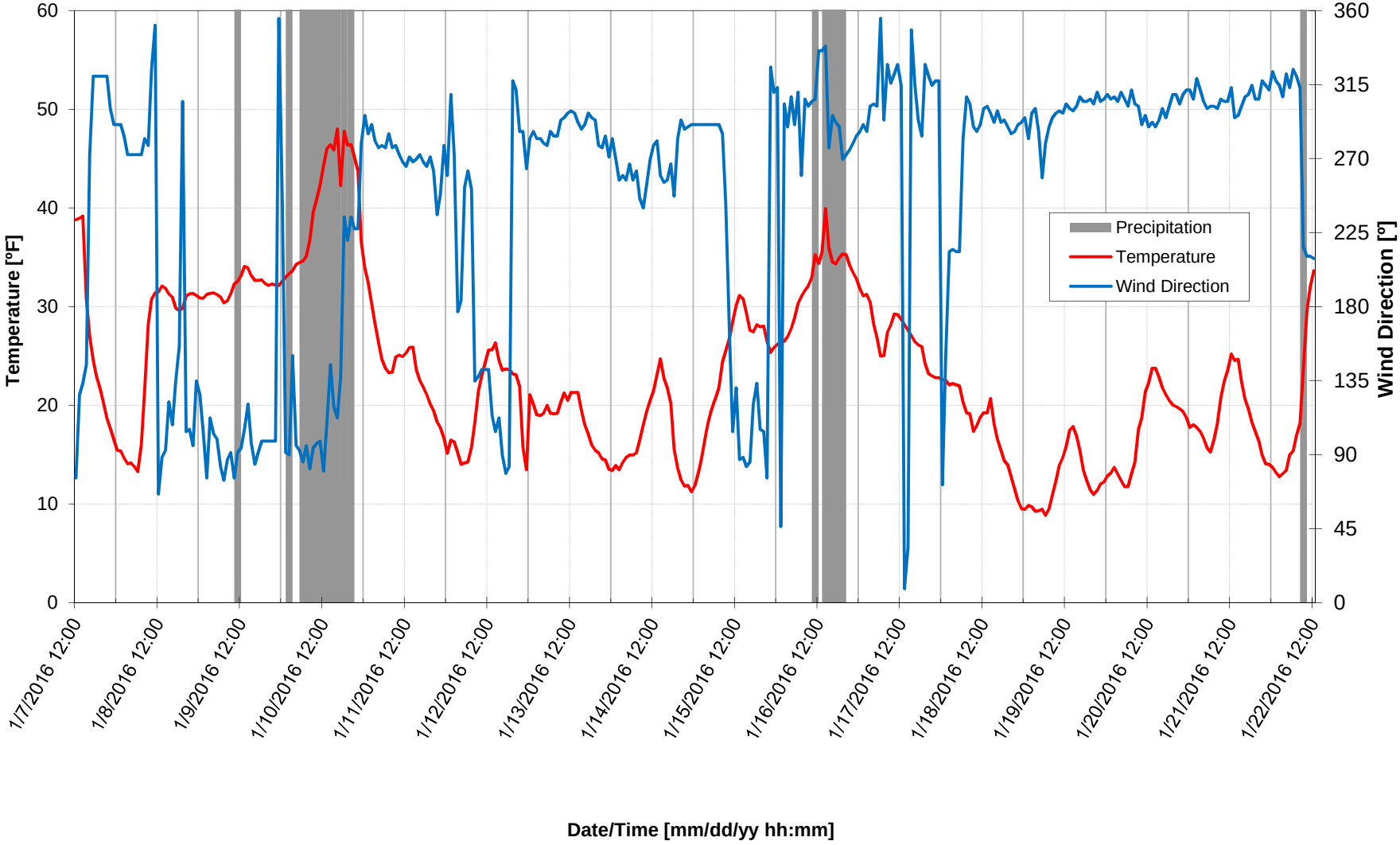
6.3 Existing Sound Levels under Worst-Case Wind Speeds

Under calm wind conditions, the wind turbines will not operate. Therefore, it is important to emphasize that it is not appropriate to compare existing condition sound levels under calm conditions (which is when the quietest background sound levels are measured), to worst-case sound levels under maximum wind turbine operations, as the wind turbines will not be operating when conditions are calm.

Figure 6-1 Typical Wind Measurement Equipment Setup – Locations L1 – L4

Figure 6-2 Weather Station Setup – Location L5 (Gregg Lake Road)

Figure 6-3
Measured Wind Direction,Temperature & Precipitation Data - Location L5
Thursday, January 7, 2016 through Friday, January 22, 2016



7.0 FUTURE CONDITIONS

7.1 Wind Turbines and Operating Conditions

The nine (9) wind turbines modeled for this project are Siemens SWT-3.2-113 wind generators. Each wind turbine will have three blades. Turbines #1 - #8 will be placed on a 92.5-meter-high tower, with a rotor diameter of 113 meters. Turbine #9 (the most southerly turbine) will have a lower hub height of 79.5 meters, and will also have a rotor diameter of 113 meters. Table 7-1 shows the manufacturer-provided broadband sound power level as a function of wind speed. Under peak noise producing operating conditions (hub height wind speed of 9.9 m/s or higher) each turbine has an A-weighted sound power level of 106.0 dBA. The sound power levels for the Siemens SWT-3.2-113 are subject to an uncertainty value (K) of 1.5 dB.

Table 7-1 Siemens SWT-3.2-113 Sound Power Levels vs. Wind Speed (dBA)

Condition	Wind speed at 10-meter reference height (m/s)						
	4	5	6	7	8	9	10
Wind speed at 92.5-m hub height (m/s)*	5.7	7.1	8.5	9.9	11.4	12.8	14.2
Sound Power Level at 92.5 m hub height (dBA re 1 pW)**	95.3	99.9	104.7	106.0	106.0	106.0	106.0
Wind speed at 79.5-m hub height (m/s)*	5.6	7.0	8.3	9.7	11.1	12.5	13.9
Sound Power Level at 79.5 m hub height (dBA re 1 pW)**	94.8	99.4	104.2	106.0	106.0	106.0	106.0

*Calculated from standardized wind speed at 10m using IEC 61400-11 logarithmic profile

**Does not include 1.5 dBA uncertainty.

Octave-band sound power levels were provided by Siemens for 8 m/s winds at a 10-meter reference height. This represents worst-case sound levels with either 79.5m hub heights or 92.5m hub heights. These octave band values are presented in Table 7-2 below.

Table 7-2 Siemens SWT-3.2-113 Octave Band Sound Power Levels (dBA)

	Octave Band Center Frequency (Hertz)								
	31.5	63	125	250	500	1000	2000	4000	8000
Sound Power Level at 79.5m or 92.5m hub height for 8 m/s winds (10-m reference)	78.4	91.9	94.5	97.8	98.4	100.0	99.1	95.7	86.8

*Does not include 1.5 dBA uncertainty.

7.2 Substation

In addition to the wind turbines, there will be a collector substation associated with the Antrim Wind Project. The transformer will be located on the property of Michael James Hutchins Ott south of Keene Road (Route 9) in Antrim approximately one half mile north-northeast of the nearest wind turbine.

The proposed transformer is rated at 24/32/40 megavolt-ampere (MVA). A transformer has various cooling mechanisms which have a modest impact on their sound levels. Typical transformers utilize ONAN (oil natural air natural), ONAF1 (oil natural air forced stage 1), and ONAF2 (oil natural air forced stage 2) for cooling. The worst-case for sound is the maximum MVA rating and forced air stage 2 cooling. This was the condition assumed for the sound modeling of this substation. In the absence of manufacturer-provided sound power data, Epsilon has estimated the sound emissions using the techniques in the Electric Power Plant Environmental Noise Guide (Edison Electric Institute), Table 4.5 Sound Power Levels of Transformers. Table 7-3 summarizes the sound power level data used in the modeling.

Table 7-3 Collector Substation Transformer – Sound Power Levels (dB)

Maximum Rating	dBA	Octave Band Center Frequency (Hertz)								
		31.5	63	125	250	500	1000	2000	4000	8000
40 MVA	92	89	95	97	92	92	86	81	76	69

7.3 Modeling Scenarios

The sound impacts associated with the proposed wind turbine generators and substation were predicted using the Cadna/A noise calculation software (DataKustik Corporation, 2013). This software uses the ISO 9613-2 international standard for sound propagation (Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation). This software performs highly refined computations that include the effects of topography, ground attenuation, multiple building reflections, drop-off with distance, and atmospheric absorption.

Inputs and significant parameters employed in the model are described below:

- *Project Layout:* A project layout [dated 10.15.2014] for nine (9) wind turbine locations was provided by Antrim Wind along with information on the collector substation for use as input in the model.

- *Sensitive Receptors:* A shape file of 344 potentially sound-sensitive structures within a 2-mile radius of any wind turbine was provided by Antrim Wind and used as input to the model. All receptors were modeled with a height of 1.5 meters AGL to mimic the ears of a typical standing observer.

- *Terrain Elevation:* Elevation contours for the modeling domain were directly imported into Cadna/A which allowed for consideration of terrain shielding where appropriate. These contours were generated from elevation information derived from Geographic Information System (GIS) data sets.

- *Source Sound Levels & Controls:* Broadband and octave band sound power levels for the Siemens SWT-3.2-113 wind turbine, presented above in Tables 7-1 and 7-2, were provided by the manufacturer, and used as input in the model. These levels represent "worst-case" operational sound level emissions corresponding to wind speeds of 8 m/s referenced to 10m AGL.

- *Meteorological Conditions:* A temperature of 10ºC (50ºF) and a relative humidity of 70% was assumed in the model. These conditions are conservative in that they minimize atmospheric attenuation at the key frequencies that compose the A-weighted total sound level.

- *Ground Attenuation:* Spectral ground absorption was calculated using a G-factor of 0.5 which corresponds to "mixed ground" consisting of both hard and porous ground cover. This method yields more conservative results (i.e., higher sound levels) as the vast majority of the area is actually forested.

The highest wind turbine sound power levels of 107.5 dBA (including the 1.5 dBA uncertainty value) were input into Cadna/A to model turbine-generated sound levels at worst-case sound levels (hub height wind speed of 9.9 m/s or higher). The collector substation was modeled assuming the worst-case cooling condition (Table 7-3) and no barrier walls around the transformers.

Sound levels due to operation of all nine wind turbines and the substation were modeled at 344 of the closest community receptors within a 2-mile radius of any wind turbine. All residences are 2,600 feet or more (one-half mile) from the nearest wind turbine. In addition to these specific locations provided by the client, sound levels were also modeled throughout a large grid of receptor points, each spaced 20 meters apart. The grid covered an area approximately 8 km by 10 km for a total of over 200,000 grid points. This made it possible to create sound level "contours" for the wind farm as a whole.

Several modeling assumptions inherent in the ISO 9613-2 calculation methodology, or selected as conditional inputs by the user, were implemented in the Cadna/A model to ensure conservative results (i.e., higher sound levels), and are described below:

- Modeled source sound power level inputs represent acoustic emissions from a similar unit measured in accordance with IEC 61400-11 corresponding to maximum sound power output, plus an additional manufacturer-provided uncertainty factor of 1.5 dBA.

- All modeled sources were assumed to be operating simultaneously and at the design wind speed corresponding to the greatest sound level impacts.

- Predicted sound levels were computed with the assumption that each receptor was always located directly downwind from every turbine simultaneously. While a physical impossibility, this provides conservative results and is required by the ISO 9613-2 standard.

- As per ISO 9613-2, the model assumed favorable conditions for sound propagation, corresponding to a moderate, well-developed ground-based temperature inversion, as might occur on a calm, clear night. This is another conservative assumption seeing as strong wind conditions (and thus higher sound levels) are often found after a frontal passage when winds are strong at all levels of the atmosphere.

- Meteorological conditions assumed in the model (T = 10°C/RH = 70%) were selected to minimize atmospheric attenuation in the 500 Hz and 1 kHz octave bands where the human ear is most sensitive.

- No additional attenuation due to tree shielding, air turbulence, or wind shadow effects was considered in the model.

This conservative set of modeling assumptions has been verified multiple times through post-construction sound level measurement programs at operating wind farms. For example, post-construction sound level measurements for Groton Wind[5], a NH ridgeline site, found that the predicted sound levels from pre-construction modeling[6] were conservative (higher) than measured sound levels under worst-case operating conditions for sound. In addition, two ridgeline wind farms in Maine, Mars Hill and Stetson Mountain I, were found to be below modeled predictions even under worst-case operating conditions.[7] A recent post-construction measurement program by Epsilon in the Midwest found sound levels were 2 to 3 dBA lower than the maximum modeled sound levels under worst-case operating conditions.

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5 http://www.nhsec.nh.gov/projects/2010-01/documents/140723sound_report.pdf

6 http://www.nhsec.nh.gov/projects/2010-01/documents/100326app35.pdf

7 Wallace, Charles F. et al, *Wind turbine noise modeling and verification: two case studies – Mars Hill and Stetson Mountain I, Maine*, presented at NOISE-CON 2011, Portland, Oregon.

7.4 Sound Level Results

Table 7-4 shows the predicted sound levels due to full wind turbine and substation operations, as modeled by the Cadna/A program. The table shows the modeled sound levels at all 344 discrete modeling receptors representing the closest noise sensitive areas within a 2-mile radius of any wind turbine under worst-case operational conditions. The results are shown with the same level of precision as provided by the Cadna/A software. Table 7-5 shows the same results as Table 7-4 except only for the 10 highest receptors sorted from high to low. Table 7-6 shows the predicted sound levels due to full wind turbine operations, as modeled by the Cadna/A program at the five monitoring locations.

The turbine-only sound level modeling results are also shown as color contour lines in Figure 7-1. The contour lines shown in Figure 7-1 show the sound level contours for worst-case wind turbine and substation operational sound levels. These are "Project-only" sound levels, and do not include any contribution from existing background sounds.

Table 7-4 Cadna/A Modeling Sound Level Results

Modeling ID	Structure Type	Broadband [dBA]
1	Trailer	36.9
2	Commercial	37.0
3	House	37.3
4	House	37.4
5	Shed	37.1
6	Shed	37.0
7	House	36.8
8	House	36.6
9	Trailer	36.4
10	Trailer	36.4
11	Trailer	36.4
12	House	35.9
13	House	36.1
14	Barn	36.0
15	House	33.3
16	House	33.1
17	House	32.6
18	State Misc.	34.2
19	Shed	34.1
20	House	38.1
21	House	36.1
22	Shed	35.9
23	House	35.6
24	House	34.4
25	House	34.3
26	Barn	34.0
27	House	34.1
28	Barn	34.4
29	House	31.3
30	House	32.4
31	House	30.3
32	House	32.8
33	House	34.2
34	House	34.7
35	House	34.8
36	House	32.7
37	House	33.0
38	Barn	32.8
39	Shed	32.8
40	House	32.7
41	House	32.5
42	House	32.0
43	House/Trailer	31.8
44	House	32.4
45	Barn	32.9
46	House	33.2
47	Barn	34.1
48	House	34.2
49	House	36.5
50	House	36.5
51	House	37.1
52	House	36.9
53	House	35.1
54	House	34.7
55	Shed	34.8
56	House	35.7
57	Shed	36.0
58	Barn	36.3
59	House	36.0
60	House	35.9
61	House	35.9
62	House	35.1
63	House	35.4
64	House	35.4
65	Shed	35.3
66	House	35.0
67	House	35.5
68	Shed	35.6
69	House	35.7
70	Shed	35.7
71	Shed	35.8
72	Trailer	35.9
73	Trailer	35.8
74	House	35.5
75	House	35.1
76	House/Trailer	34.6
77	House	37.5
78	House	34.9
79	House	35.0
80	Shed	35.1
81	Barn	32.7
82	House	32.6
83	House	32.6
84	House	32.1
85	Trailer	36.4
86	House	36.3

Table 7-4 Cadna/A Modeling Sound Level Results (Continued)

Modeling ID	Structure Type	Broadband [dBA]
87	Shed	36.3
88	House	35.9
89	Camp	36.2
90	Circ Hut	34.9
91	House	31.8
92	Barn	31.7
93	House	31.4
94	House	30.3
95	House	30.6
96	House	31.8
97	Shed	31.5
98	Garage	30.5
99	House	30.5
100	Garage	31.0
101	House	31.1
102	House	30.4
103	Barn	29.9
104	House	30.1
105	House	30.0
106	House	30.0
107	Shed	30.0
108	House	31.1
109	House	27.8
110	House	30.8
111	House	32.4
112	House	32.3
113	Shed	32.0
114	House	34.9
115	House	32.7
116	House	32.5
117	Barn	32.6
118	House	32.3
119	Barn	32.2
120	Garage	32.3
121	House	32.4
122	House	32.2
123	House	32.2
124	House	32.1
125	House	31.7
126	House	31.7
127	House	31.4
128	House	33.4
129	House	33.0
130	Barn	32.9
131	House/Trailer	32.6
132	House	32.5
133	House	32.9
134	House	32.4
135	Garage	32.5
136	House	31.8
137	House	32.1
138	House	32.2
139	House	34.8
140	Barn	34.8
141	House	34.6
142	House	34.4
143	Shed	34.0
144	House	34.2
145	House	35.8
146	House	36.0
147	Barn	32.5
148	House	37.6
149	House	36.0
150	House	35.9
151	House	27.9
152	Barn	28.0
153	House	25.5
154	House	24.9
155	House	28.6
156	House	29.1
157	Garage	29.2
158	House	29.3
159	House	29.4
160	Trailer	29.4
161	House	29.7
162	Barn	29.7
163	House	29.9
164	House	30.3
165	Shed	30.4
166	House	31.1
167	House	30.6
168	House	31.8
169	Barn	31.8
170	House	31.6
171	House	29.0
172	House	28.7

Table 7-4 Cadna/A Modeling Sound Level Results (Continued)

Modeling ID	Structure Type	Broadband [dBA]
173	Camp	29.4
174	House	30.3
175	House	29.6
176	House	30.3
177	Shed	30.2
178	Shed	30.1
179	House	29.7
180	House	32.1
181	House	31.6
182	House	31.5
183	House	31.5
184	House	30.1
185	House	29.9
186	House	29.9
187	House	29.9
188	House	29.8
189	House	29.8
190	House	29.7
191	House	29.6
192	House	29.4
193	House	29.3
194	House	29.4
195	House	29.4
196	House	29.1
197	House	29.0
198	House	29.0
199	House	28.9
200	House	28.9
201	House	28.6
202	House	28.8
203	House	28.8
204	House	28.8
205	Shed	28.7
206	House	28.6
207	House	28.5
208	House	27.4
209	House	31.5
210	Barn	31.2
211	Barn	31.4
212	House	29.3
213	Garage	29.3
214	House	26.1
215	Garage	26.1

Modeling ID	Structure Type	Broadband [dBA]
216	Garage	29.1
217	House	29.1
218	House	30.1
219	House	29.9
220	House	28.6
221	Shed	29.0
222	Shed	29.3
223	House	29.2
224	House	26.7
225	Garage	26.7
226	House	26.4
227	House	21.4
228	House	26.0
229	House	17.2
230	House	12.5
231	House	25.5
232	House	25.5
233	House	28.1
234	Shed	25.4
235	House	28.6
236	House	29.4
237	House	29.3
238	House	27.6
239	House	30.3
240	House	30.7
241	House	31.2
242	Barn	31.3
243	Shed	30.4
244	House	28.3
245	House	1.8
246	House	27.9
247	House	26.1
248	Garage	27.9
249	Garage	26.1
250	House	29.4
251	House	27.7
252	Garage	27.8
253	House	28.4
254	House	28.5
255	House	28.8
256	House	28.8
257	House	28.8
258	House	28.5

Table 7-4 Cadna/A Modeling Sound Level Results (Continued)

Modeling ID	Structure Type	Broadband [dBA]
259	House	28.1
260	Barn	28.1
261	House	28.8
262	House	28.6
263	House	28.5
264	House	28.8
265	House	28.3
266	Barn	28.3
267	House	28.2
268	House	28.1
269	House	28.4
270	House	27.1
271	Barn	28.4
272	House	28.0
273	House	27.9
274	House	27.8
275	Garage	27.8
276	House	30.4
277	House	30.2
278	House	29.9
279	Barn	25.8
280	Trailer	27.3
281	House	28.9
282	House	28.8
283	Shed	28.8
284	House	28.1
285	House	29.1
286	House	22.1
287	House	26.6
288	House	26.6
289	House	21.5
290	House	26.3
291	House	26.6
292	House	26.5
293	Garage	26.5
294	House	26.6
295	House	26.6
296	House	26.4
297	House	26.5
298	House	26.3
299	House	26.9
300	House	25.3
301	House	26.4
302	House	26.5
303	Garage	26.5
304	House	26.4
305	House	26.2
306	House	26.3
307	Trailer	26.3
308	House	26.5
309	House	26.5
310	Shed	26.3
311	House	26.4
312	House	26.9
313	House	26.5
314	Barn	26.7
315	House	26.4
316	House	26.4
317	House	26.1
318	Shed	26.0
319	Barn	25.9
320	House	27.8
321	House	28.2
322	Garage	28.2
323	House	28.6
324	Garage	28.7
325	Shed	28.7
326	House	28.8
327	Garage	29.7
328	House	29.6
329	House	29.6
330	House	29.7
331	Garage	29.5
332	Garage	29.4
333	House	27.7
334	House	27.4
335	House	27.7
336	Garage	27.6
337	House	26.9
338	Barn	21.9
339	House	30.8
340	House	30.7
341	House	29.0
342	House	30.0
343	Barn	30.1
344	House	30.1

Table 7-5 Cadna/A Modeling Sound Level Results – 10 highest receptors

Modeling ID	Structure Type	Broadband [dBA]
20	House	38.1
148	House	37.6
77	House	37.5
4	House	37.4
3	House	37.3
5	Shed	37.1
51	House	37.1
2	Commercial	37.0
6	Shed	37.0
1	Trailer	36.9

Table 7-6 Cadna/A Modeling Sound Level Results – Ambient Monitoring Locations

Location	9 Wind Turbines and substation (dBA)
Location L1 – Keene Road	38.3
Location L2 – Loveren Mill Road	32.5
Location L3 – Salmon Brook Road	37.2
Location L4 – Reed Carr Road	35.9
Location L5 – Gregg Lake Road	30.5

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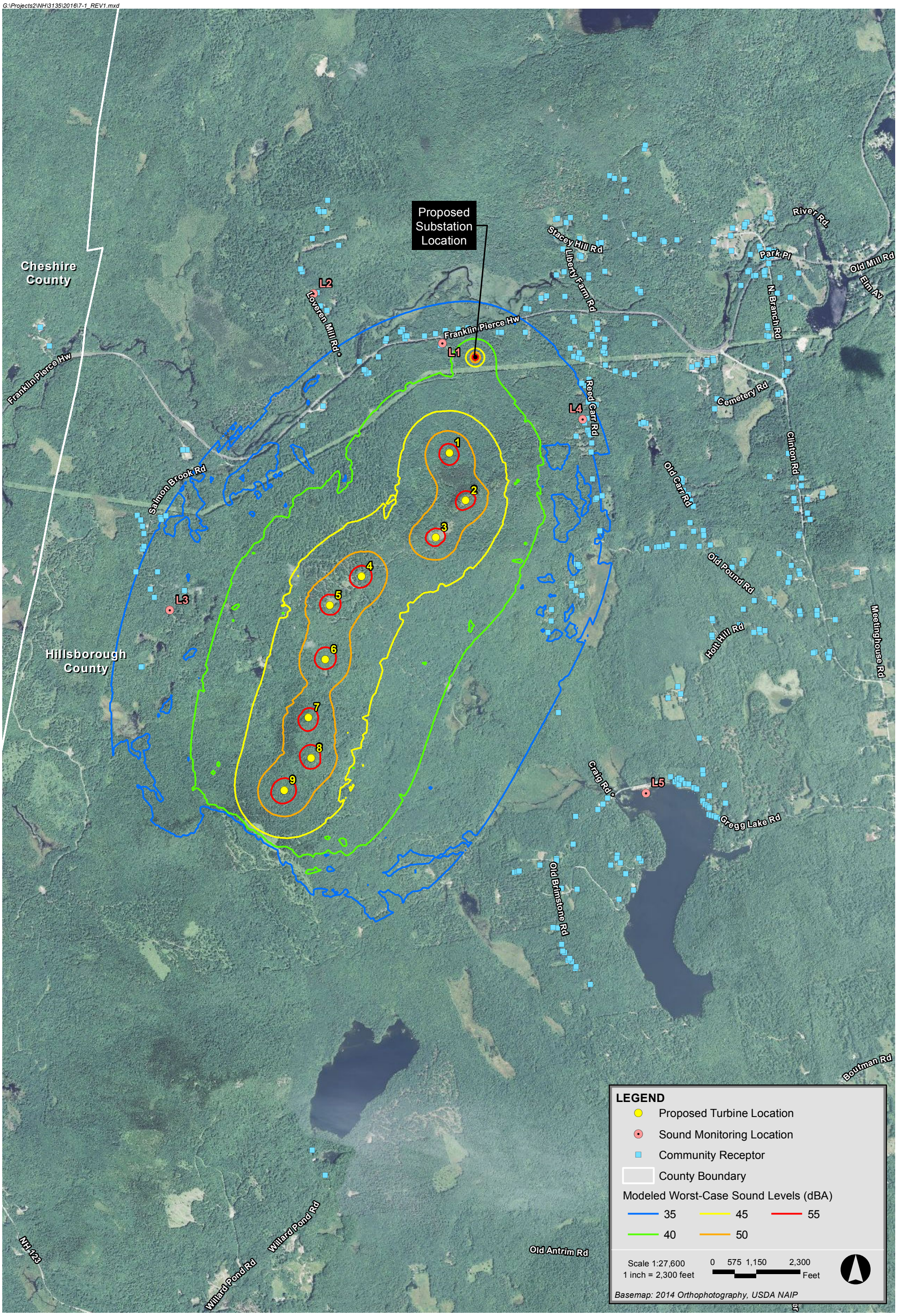


Antrim Wind **Antrim, New Hampshire**

Epsilon ASSOCIATES INC.

Figure 7-1

Modeled Worst-Case Sound Levels (dBA)

8.0 EVALUATION OF SOUND LEVELS

The Project will be subject to the requirements contained in the recently adopted NH SEC sound standards for wind energy facilities of 45 dBA (daytime) or 40 dBA (nighttime) contained in Site 301.14(f)(2)(a). The Project is also subject to the sound levels specified in the Agreement between the Town of Antrim and Antrim Wind Energy LLC as noted previously.

The predicted worst-case sound levels from the Antrim Wind Energy Project will be below 40 dBA at all occupied buildings. A review of Table 7-5 shows that the highest sound level will be under 40 dBA at receptor #20 (38.1 dBA) under worst-case operating conditions. Therefore, the Antrim Wind Energy Project will easily meet the standards set forth by the NH SEC in Site 301.14 for wind energy facilities and the criteria in the Agreement with the Town of Antrim.

9.0 CONCLUSIONS

A comprehensive sound level assessment was conducted for the Antrim Wind Energy Project. Baseline sound levels were measured to characterize the existing background sound levels within the area. Turbine-only sound levels were then predicted throughout the entire wind farm, and off-site, so as to determine the future sound levels expected under worst-case operations.

Sound levels due to wind turbine operation are expected to be approximately 38 dBA or less at all residences. These sound levels will meet all applicable regulatory requirements including:

1. NH SEC Site 301.14 (45 dBA daytime; 40 dBA nighttime).

2. Agreement between the Town of Antrim and Antrim Wind Energy (50 dBA daytime; 45 dBA nighttime).

The Project will also create sound levels well below other relevant guidelines including:

1. Previously approved noise conditions from the NH SEC for the Lempster and Groton wind projects

2. Proposed conditions by the SEC for the previous Antrim Wind project in Docket 2012-01

3. The World Health Organization's 1999 hourly guideline[8] and 2009 annual guideline[9]

4. The US EPA guideline of 48.6 dBA (24-hour) which is equal to an L_{dn} of 55 dBA[10]

[8] "Guidelines for Community Noise," Edited by B. Berglund et al, World Health Organization, Geneva, Switzerland, 1999.

[9] "Night Noise Guidelines for Europe," World Health Organization for Europe, Copenhagen, Denmark, 2009.

[10] "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Washington, DC, March 1974, report # 550/9-74-004.

Appendix A
NWS Meteorological Data – Jaffrey Muni Airport Silver Ranch

Attachment 9

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA (final) HOURLY OBSERVATIONS TABLE JAFFREY MINI-SLVR RNCH APT (54770) JAFFREY, NH (01/2016)

Elevation: 1040 ft. above sea level
Latitude: 42.805
Longitude: -72.003
Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Alti-meter (in. hg)
						(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	0023	12	BKN028 OVC035	10.00		34	1.1	31	-0.5	26	-3.3	73	3	VR		28.84			M	SP		29.95
01	0052	12	OVC023	10.00		34	1.1	31	-0.5	26	-3.3	73	6	VR		28.82			29.97	AA		29.93
01	0128	12	SCT025 OVC032	10.00		33	0.6	30	-0.8	26	-3.3	75	3	260		28.82			M	SP		29.93
01	0152	12	OVC034	10.00		33	0.6	30	-1.0	25	-3.9	72	3	230		28.82			29.98	AA		29.93
01	0245	12	OVC029	10.00		33	0.6	30	-1.2	24	-4.4	70	5	250		28.82			M	SP		29.93
01	0252	12	OVC029	10.00		33	0.6	30	-1.2	24	-4.4	70	0	000		28.82			29.97	AA		29.93
01	0319	12	OVC030	10.00		33	0.6	30	-1.2	24	-4.4	70	5	280		28.81			M	SP		29.92
01	0352	12	OVC031	10.00		33	0.6	30	-1.2	24	-4.4	70	0	000		28.81			29.96	AA		29.92
01	0401	12	OVC029	10.00		33	0.6	30	-1.2	24	-4.4	70	0	000		28.81			M	SP		29.92
01	0445	12	OVC032	10.00		33	0.6	30	-1.2	24	-4.4	70	5	VR		28.80			M	SP		29.91
01	0452	12	OVC032	10.00		33	0.6	30	-1.2	24	-4.4	70	3	VR		28.80			29.96	AA		29.91
01	0552	12	OVC036	10.00		32	0.0	29	-1.6	24	-4.4	72	3	VR		28.81			29.96	AA		29.92
01	0652	12	OVC036	10.00		32	0.0	29	-1.6	24	-4.4	72	5	180		28.80			29.96	AA		29.91
01	0752	12	OVC031	10.00		33	0.6	29	-1.4	23	-5.0	67	5	VR		28.80			29.96	AA		29.91
01	0852	12	OVC041	10.00		33	0.6	29	-1.4	23	-5.0	67	3	VR		28.81			29.96	AA		29.92
01	0952	12	OVC032	10.00		34	1.1	30	-1.1	23	-5.0	64	7	VR		28.81			29.96	AA		29.92
01	1052	12	OVC034	10.00		34	1.1	30	-1.1	23	-5.0	64	6	VR		28.79			29.94	AA		29.90
01	1152	12	OVC036	10.00		35	1.7	30	-0.9	22	-5.6	59	13	270	29	28.77			29.92	AA		29.88
01	1252	12	OVC036	10.00		34	1.1	29	-1.4	21	-6.1	59	10	280	20	28.77			29.92	AA		29.88
01	1352	12	OVC049	10.00		35	1.7	30	-1.1	21	-6.1	57	9	260		28.74			29.89	AA		29.84
01	1452	12	OVC041	10.00		34	1.1	29	-1.4	21	-6.1	59	6	250		28.74			29.88	AA		29.84
01	1552	12	BKN035 BKN047 OVC055	10.00		33	0.6	29	-1.4	23	-5.0	67	6	240		28.74			29.88	AA		29.84
01	1652	12	SCT025 BKN033 OVC065	10.00		33	0.6	30	-1.2	24	-4.4	70	0	000		28.72			29.88	AA	T	29.83
01	1703	12	BKN023 OVC033	7.00	-SN	33	0.6	30	-1.2	24	-4.4	70	5	240		28.72			M	SP		29.83
01	1718	12	SCT025 BKN043 OVC070	8.00		32	0.0	29	-1.4	25	-3.9	75	9	220		28.74			M	SP		29.84
01	1752	12	FEW033 OVC070	10.00		32	0.0	29	-1.6	24	-4.4	72	3	VR		28.74			29.88	AA	T	29.84
01	1852	12	OVC080	10.00		32	0.0	28	-2.1	21	-6.1	64	5	VR		28.74			29.90	AA		29.85
01	1952	12	OVC080	10.00		31	-0.6	27	-2.6	20	-6.7	64	8	250		28.74			29.90	AA		29.85
01	2052	12	BKN045 BKN075	10.00		30	-1.1	25	-3.6	16	-8.9	56	13	260	25	28.74			29.90	AA		29.85
01	2152	12	SCT040 BKN080	10.00		29	-1.7	25	-3.9	16	-8.9	58	11	250	18	28.74			29.89	AA		29.85
01	2252	12	FEW048 OVC070	10.00		28	-2.2	24	-4.2	17	-8.3	63	8	260		28.75			29.91	AA		29.86
01	2352	12	OVC075	10.00		28	-2.2	25	-4.0	18	-7.8	66	8	250		28.75			29.91	AA		29.86
02	0052	12	FEW070	10.00		27	-2.8	24	-4.4	18	-7.8	69	6	VR		28.76			29.91	AA		29.87
02	0152	12	BKN070	10.00		26	-3.3	23	-4.9	17	-8.3	69	7	VR		28.75			29.91	AA		29.86
02	0252	12	FEW027 OVC055	10.00		27	-2.8	24	-4.5	17	-8.3	66	5	250		28.75			29.91	AA		29.86
02	0352	12	FEW042 OVC050	10.00		27	-2.8	24	-4.5	17	-8.3	66	6	250		28.74			29.90	AA		29.85
02	0452	12	OVC044	10.00		27	-2.8	24	-4.2	19	-7.2	72	6	VR		28.75			29.91	AA	T	29.86
02	0552	12	FEW037 OVC044	10.00		27	-2.8	24	-4.2	19	-7.2	72	7	260		28.75			29.91	AA		29.86
02	0652	12	OVC046	10.00		28	-2.2	25	-3.8	19	-7.2	69	7	220		28.77			29.93	AA		29.88
02	0752	12	FEW033 OVC042	10.00		28	-2.2	25	-3.8	19	-7.2	69	3	VR		28.79			29.95	AA		29.90
02	0821	12	BKN026 BKN035 OVC042	10.00		28	-2.2	25	-3.8	19	-7.2	69	5	250		28.79			M	SP		29.90
02	0832	12	FEW026 OVC039	10.00		29	-1.7	26	-3.5	19	-7.2	66	9	260		28.79			M	SP		29.90
02	0852	12	FEW026 OVC039	10.00		29	-1.7	26	-3.5	19	-7.2	66	7	250		28.80			29.96	AA		29.91
02	0952	12	SCT039	10.00		30	-1.1	26	-3.3	18	-7.8	61	7	VR	17	28.81			29.97	AA		29.92
02	1052	12	SCT033	10.00		31	-0.6	26	-3.1	17	-8.3	56	11	260		28.80			29.96	AA		29.91
02	1152	12	BKN036	10.00		32	0.0	27	-2.7	17	-8.3	54	9	280		28.77			29.93	AA		29.88
02	1252	12	OVC037	10.00		32	0.0	27	-2.7	17	-8.3	54	9	300	17	28.77			29.93	AA		29.88
02	1352	12	SCT037	10.00		32	0.0	27	-2.7	17	-8.3	54	9	290		28.75			29.91	AA		29.86
02	1452	12	SCT039	10.00		32	0.0	27	-2.9	16	-8.9	52	8	270		28.75			29.91	AA		29.86
02	1552	12	OVC037	10.00		31	-0.6	26	-3.2	16	-8.9	54	8	270	18	28.76			29.92	AA		29.87
02	1652	12	OVC035	10.00		31	-0.6	27	-2.9	18	-7.8	59	10	270	18	28.75			29.91	AA		29.86
02	1752	12	OVC036	10.00		31	-0.6	27	-2.9	18	-7.8	59	10	260	17	28.76			29.92	AA		29.87
02	1852	12	OVC034	10.00		31	-0.6	27	-2.9	18	-7.8	59	3	VR		28.76			29.92	AA		29.87
02	1952	12	OVC036	10.00		31	-0.6	27	-2.9	18	-7.8	59	5	220		28.76			29.93	AA		29.87
02	2052	12	OVC036	10.00		30	-1.1	26	-3.3	18	-7.8	61	7	VR		28.75			29.91	AA		29.86
02	2152	12	OVC034	10.00		30	-1.1	26	-3.1	19	-7.2	64	5	210		28.74			29.89	AA		29.84
02	2252	12	OVC033	10.00		30	-1.1	26	-3.1	19	-7.2	64	7	240		28.71			29.87	AA		29.82
02	2352	12	OVC031	10.00		30	-1.1	26	-3.1	19	-7.2	64	5	230		28.71			29.86	AA		29.81
03	0050	12	OVC029	10.00		30	-1.0	26	-3.1	19	-7.0	64	8	230		28.69			M	SP		29.80
03	0052	12	OVC029	10.00		30	-1.1	26	-3.1	19	-7.2	64	8	230		28.69			29.84	AA		29.80
03	0152	12	OVC027	10.00		30	-1.1	26	-3.1	19	-7.2	64	6	220		28.68			29.83	AA		29.78
03	0252	12	OVC027	10.00		30	-1.1	27	-3.0	20	-6.7	66	7	210		28.67			29.82	AA		29.77
03	0350	12	SCT028	10.00		28	-2.0	25	-3.8	19	-7.0	69	7	220		28.63			M	SP		29.73
03	0352	12	SCT028	10.00		29	-1.7	26	-3.3	20	-6.7	69	7	210		28.63			29.78	AA		29.73
03	0452	12	CLR	10.00		28	-2.2	25	-3.8	19	-7.2	69	7	210		28.63			29.78	AA		29.73
03	0552	12	CLR	10.00		27	-2.8	24	-4.2	19	-7.2	72	8	210		28.61			29.75	AA		29.71
03	0652	12	CLR	10.00		26	-3.3	24	-4.6	19	-7.2	75	6	200		28.61			29.76	AA		29.71
03	0752	12	FEW120	10.00		26	-3.3	24	-4.6	19	-7.2	75	8	220		28.61			29.76	AA		29.71
03	0852	12	FEW035	10.00		27	-2.8	25	-4.0	20	-6.7	75	10	190		28.61			29.76	AA		29.71
03	0952	12	FEW031 BKN042	10.00		30	-1.1	27	-3.0	20	-6.7	66	9	210	17	28.62			29.77	AA		29.72
03	1052	12	OVC040	10.00		31	-0.6	28	-2.4	21	-6.1	66	9	220		28.60			29.75	AA		29.70
03	1152	12	FEW044	10.00		33	0.6	29	-1.6	22	-5.6	64	8	240		28.58			29.72	AA		29.68
03	1252	12	FEW032	10.00		36	2.2	31	-0.6	22	-5.6	57	15	260	21	28.56			29.71	AA		29.66
03	1352	12	BKN038	10.00		36	2.2	31	-0.6	22	-5.6	57	11	240	22	28.56			29.71	AA		29.66
03	1452	12	BKN039 BKN047	10.00		36	2.2	31	-0.6	22	-5.6	57	13	250	20	28.59			29.73	AA		29.69
03	1552	12	OVC039	10.00		36	2.2	31	-0.4	23	-5.0	59	8	230		28.60			29.75	AA		29.70
03	1652	12	BKN037 OVC080	10.00		35	1.7	31	-0.7	23	-5.0	62	8	220		28.61			29.76	AA		29.71
03	1752	12	BKN036 OVC046	10.00		35	1.7	31	-0.7	23	-5.0	62	8	250	17	28.63			29.78	AA		29.73
03	1852	12	OVC044	10.00		34	1.1	30	-1.1	23	-5.0	64	3	VR		28.64			29.79	AA		29.74
03	1952	12	FEW048	10.00		34	1.1	30	-1.1	23	-5.0	64	3	VR		28.65			29.80	AA		29.75

03	2052	12	CLR	10.00		30	-1.1	28	-2.4	23	-5.0	75	0	000		28.66			29.81	AA	29.76
03	2152	12	CLR	10.00		32	0.0	29	-1.8	23	-5.0	69	8	260		28.67			29.81	AA	29.77
03	2252	12	SCT034	10.00		31	-0.6	28	-2.1	23	-5.0	72	0	000		28.67			29.82	AA	29.77
03	2352	12	FEW040	10.00		31	-0.6	28	-2.1	23	-5.0	72	6	290		28.68			29.83	AA	29.78
04	0052	12	OVC047	10.00		31	-0.6	28	-2.3	22	-5.6	69	0	000		28.68			29.82	AA	29.78
04	0152	12	OVC055	10.00		30	-1.1	27	-2.6	22	-5.6	72	3	VR		28.68			29.83	AA	29.78
04	0250	12	FEW020 BKN029 BKN040	10.00		30	-1.0	28	-2.4	23	-5.0	75	0	000		28.69			M	SP	29.80
04	0252	12	FEW020 BKN027 BKN040	10.00		30	-1.1	28	-2.4	23	-5.0	75	3	VR		28.69			29.85	AA	29.80
04	0352	12	BKN028 OVC035	10.00		29	-1.7	26	-3.1	21	-6.1	72	5	VR		28.71			29.86	AA	29.81
04	0428	12	SCT027 BKN034 OVC055	10.00		28	-2.2	25	-4.0	18	-7.8	66	5	VR		28.71			M	SP	29.82
04	0452	12	FEW027 BKN037 OVC050	10.00		27	-2.8	24	-4.4	18	-7.8	69	7	340		28.72			29.88	AA	29.83
04	0552	12	BKN037	10.00		23	-5.0	21	-6.3	15	-9.4	71	9	350		28.75			29.91	AA	29.86
04	0652	12	FEW060	10.00		20	-6.7	18	-8.0	11	-11.7	68	7	VR		28.79			29.96	AA	29.90
04	0752	12	CLR	10.00		18	-7.8	15	-9.3	7	-13.9	62	8	330		28.83			29.99	AA	29.94
04	0852	12	OVC070	10.00		17	-8.3	14	-9.7	7	-13.9	65	5	320		28.85			30.02	AA	29.96
04	0952	12	OVC065	10.00		17	-8.3	14	-9.8	6	-14.4	62	7	320		28.87			30.03	AA	29.98
04	1052	12	SCT048 BKN060	10.00		18	-7.8	15	-9.5	5	-15.0	57	10	320		28.87			30.04	AA	29.98
04	1152	12	OVC045	10.00		18	-7.8	15	-9.5	5	-15.0	57	7	VR		28.86			30.03	AA	29.97
04	1252	12	FEW033 OVC045	10.00		18	-7.8	15	-9.6	4	-15.6	54	9	300		28.86			30.03	AA	29.97
04	1352	12	OVC036	10.00		18	-7.8	14	-9.7	3	-16.1	52	8	310		28.88			30.05	AA	29.99
04	1452	12	CLR	10.00		18	-7.8	14	-9.9	1	-17.2	47	11	330	18	28.90			30.07	AA	30.01
04	1552	12	CLR	10.00		16	-8.9	12	-10.9	-1	-18.3	47	8	350		28.93			30.10	AA	30.04
04	1652	12	CLR	10.00		12	-11.1	9	-12.6	-1	-18.3	56	9	350		28.98			30.15	AA	30.09
04	1752	12	CLR	10.00		10	-12.2	8	-13.5	-2	-18.9	58	7	VR		29.00			30.19	AA	30.12
04	1852	12	CLR	10.00		9	-12.8	7	-13.9	-2	-18.9	61	5	VR		29.05			30.24	AA	30.16
04	1939	12	BKN027	10.00		8	-13.3s	6	-14.4	-3	-19.4	60	5	VR		29.08			M	SP	30.20
04	1952	12	BKN027	10.00		8	-13.3	6	-14.4	-3	-19.4	60	5	VR		29.09			30.29	AA	30.21
04	2012	12	FEW028	10.00		7	-13.9	5	-14.9	-4	-20.0	60	6	360		29.10			M	SP	30.22
04	2052	12	CLR	10.00		7	-13.9	5	-14.9	-4	-20.0	60	7	VR		29.12			30.32	AA	30.24
04	2152	12	CLR	10.00		5	-15.0	3	-15.9	-5	-20.6	63	6	VR		29.14			30.35	AA	30.26
04	2252	12	CLR	10.00		4	-15.6	2	-16.4	-6	-21.1	63	6	VR		29.16			30.37	AA	30.28
04	2352	12	CLR	10.00		3	-16.1	1	-16.9	-7	-21.7	63	6	010		29.17			30.38	AA	30.29
05	0052	12	CLR	10.00		3	-16.1	1	-16.9	-7	-21.7	63	3	VR		29.19			30.39	AA	30.31
05	0152	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	5	010		29.21			30.41	AA	30.33
05	0252	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	5	VR		29.22			30.43	AA	30.34
05	0352	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	7	360		29.24			30.45	AA	30.36
05	0452	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	5	360		29.26			30.47	AA	30.38
05	0552	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	0	000		29.28			30.50	AA	30.40
05	0652	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	0	000		29.32			30.53	AA	30.44
05	0752	12	CLR	10.00		2	-16.7	1	-17.4	-7	-21.7	66	0	000		29.33			30.54	AA	30.45
05	0852	12	CLR	10.00		7	-13.9	5	-15.1	-7	-21.7	52	6	VR		29.36			30.57	AA	30.48
05	0952	12	CLR	10.00		11	-11.7	8	-13.3	-6	-21.1	46	0	000		29.36			30.58	AA	30.49
05	1052	12	CLR	10.00		15	-9.4	11	-11.7	-7	-21.7	37	5	VR		29.36			30.56	AA	30.48
05	1152	12	CLR	10.00		18	-7.8	13	-10.5	-7	-21.7	32	6	310		29.34			30.56	AA	30.47
05	1252	12	CLR	10.00		20	-6.7	14	-9.7	-7	-21.7	30	5	VR		29.34			30.54	AA	30.46
05	1352	12	CLR	10.00		22	-5.6	16	-8.8	-6	-21.1	28	8	300		29.33			30.53	AA	30.45
05	1452	12	CLR	10.00		23	-5.0	17	-8.4	-6	-21.1	27	5	VR		29.33			30.53	AA	30.45
05	1552	12	CLR	10.00		22	-5.6	16	-8.8	-5	-20.6	30	5	240		29.34			30.55	AA	30.47
05	1652	12	CLR	10.00		16	-8.9	12	-10.8	-0	-17.8	49	0	000		29.36			30.58	AA	30.49
05	1752	12	CLR	10.00		13	-10.6	11	-11.8	2	-16.7	61	0	000		29.37			30.58	AA	30.50
05	1852	12	CLR	10.00		11	-11.7	9	-12.7	2	-16.7	67	3	170		29.37			30.59	AA	30.50
05	1952	12	CLR	10.00		14	-10.0	11	-11.5	1	-17.2	56	6	180		29.37			30.59	AA	30.50
05	2052	12	CLR	10.00		11	-11.7	9	-12.7	2	-16.7	67	3	180		29.36			30.58	AA	30.49
05	2152	12	CLR	10.00		13	-10.6	11	-11.8	2	-16.7	61	6	170		29.36			30.57	AA	30.49
05	2252	12	CLR	10.00		13	-10.6	11	-11.8	2	-16.7	61	6	180		29.36			30.57	AA	30.49
05	2352	12	CLR	10.00		11	-11.7	9	-12.7	2	-16.7	67	3	190		29.34			30.55	AA	30.47
06	0052	12	CLR	10.00		13	-10.6	11	-11.8	2	-16.7	61	8	180		29.34			30.54	AA	30.46
06	0152	12	CLR	10.00		13	-10.6	10	-11.9	1	-17.2	58	6	180		29.34			30.53	AA	30.46
06	0252	12	CLR	10.00		13	-10.6	10	-12.0	-0	-17.8	56	3	170		29.33			30.53	AA	30.45
06	0352	12	CLR	10.00		13	-10.6	10	-11.9	1	-17.2	58	7	180		29.33			30.52	AA	30.45
06	0452	12	CLR	10.00		13	-10.6	10	-11.9	1	-17.2	58	6	180		29.32			30.52	AA	30.44
06	0552	12	CLR	10.00		12	-11.1	10	-12.4	1	-17.2	61	6	170		29.32			30.53	AA	30.44
06	0652	12	CLR	10.00		7	-13.9	6	-14.5	1	-17.2	76	0	000		29.32			30.53	AA	30.44
06	0752	12	CLR	10.00		11	-11.7	9	-12.6	3	-16.1	70	5	170		29.32			30.52	AA	30.44
06	0852	12	CLR	10.00		17	-8.3	14	-10.1	3	-16.1	54	8	180		29.31			30.51	AA	30.43
06	0952	12	CLR	10.00		23	-5.0	18	-7.8	2	-16.7	40	6	210		29.31			30.50	AA	30.43
06	1052	12	CLR	10.00		30	-1.1	23	-5.2	2	-16.7	30	6	VR		29.30			30.49	AA	30.42
06	1152	12	CLR	10.00		34	1.1	25	-4.1	-2	-18.9	21	7	230		29.27			30.45	AA	30.39
06	1252	12	CLR	10.00		36	2.2	26	-3.5	-4	-20.0	18	9	210		29.25			30.43	AA	30.37
06	1352	12	CLR	10.00		37	2.8	27	-2.8	1	-17.2	22	8	200		29.22			30.40	AA	30.34
06	1452	12	CLR	10.00		37	2.8	27	-2.6	3	-16.1	24	7	200		29.21			30.39	AA	30.33
06	1552	12	CLR	10.00		36	2.2	26	-3.1	2	-16.7	24	8	200		29.21			30.39	AA	30.33
06	1652	12	CLR	10.00		28	-2.2	23	-5.2	9	-12.8	45	5	200		29.20			30.39	AA	30.32
06	1752	12	CLR	10.00		27	-2.8	22	-5.7	8	-13.3	44	7	190		29.20			30.39	AA	30.32
06	1852	12	CLR	10.00		29	-1.7	23	-5.1	7	-13.9	39	8	200		29.21			30.40	AA	30.33
06	1952	12	CLR	10.00		28	-2.2	22	-5.6	6	-14.4	39	8	200		29.20			30.40	AA	30.32
06	2052	12	CLR	10.00		28	-2.2	22	-5.7	5	-15.0	37	8	180		29.19			30.37	AA	30.31
06	2152	12	CLR	10.00		27	-2.8	21	-6.1	4	-15.6	37	7	200		29.20			30.38	AA	30.32
06	2252	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	6	180		29.19			30.37	AA	30.31
06	2352	12	CLR	10.00		25	-3.9	19	-7.0	3	-16.1	38	8	200		29.17			30.35	AA	30.29
07	0052	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	7	180		29.15			30.32	AA	30.27
07	0152	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	6	170		29.15			30.32	AA	30.27
07	0252	12	CLR	10.00		22	-5.6	18	-7.8	6	-14.4	50	3	170		29.14			30.32	AA	30.26
07	0352	12	CLR	10.00		18	-7.8	15	-9.4	6	-14.4	59	5	170		29.14			30.32	AA	30.26
07	0452	12	CLR	10.00		15	-9.4	13	-10.5	7	-13.9	70	0	000		29.15			30.34	AA	30.27
07	0552	12	CLR	10.00		12	-11.1	11	-11.8	6	-14.4	77	3	170		29.17			30.35	AA	30.29
07	0652	12	CLR	10.00		10	-12.2	9	-12.7	6	-14.4	84	3	180		29.18			30.37	AA	30.30
07	0752	12	CLR	10.00		11	-11.7	10	-12.1	7	-13.9	84	0	000		29.18			30.37	AA	30.30
07	0852	12	CLR	10.00		17	-8.3	15	-9.2	11	-11.7	77	0	000		29.18			30.37	AA	30.30
07	0952	12	CLR	10.00		26	-3.3	22	-5.7	11	-11.7	53	0	000		29.18			30.36	AA	30.30
07	1052	12	CLR	10.00		32	0.0	25	-3.9	8	-13.3	36	0	000		29.17			30.35	AA	30.29
07	1152	12	CLR	10.00		37	2.8	27	-2.5	5	-15.0	26	3	VR		29.13			30.30	AA	30.25
07	1252	12	CLR	10.00		41	5.0	30	-1.2	4	-15.6	21	3	VR		29.10			30.26	AA	30.22
07	1352	12	CLR	10.00		43	6.1s	31	-0.7	2	-16.7	18	3	VR		29.07			30.24	AA	30.19
07	1452	12	CLR	10.00		43	6.1	31	-0.4	5	-15.0	21	0	000		29.07			30.24	AA	30.19
07	1552	12	CLR	10.00		36	2.2	29	-1.8	14	-10.0	40	0	000		29.08			30.26	AA	30.20
07	1652	12	CLR	10.00		30	-1.1	25	-4.0	13	-10.6	49	0	000		29.09			30.27	AA	30.21
07	1752	12	CLR	10.00		25	-3.9	22	-5.7	14	-10.0	63	0	000		29.11			30.30	AA	30.23
07	1852	12	CLR	10.00		21	-6.1	19	-7.3	13	-10.6	71	0	000		29.12			30.31	AA	30.24
07	1952	12	CLR	10.00		20	-6.7	18	-7.7	13	-10.6	74	0	000		29.14			30.33	AA	30.26
07	2052	12	CLR	10.00		19	-7.2	17	-8.2	12	-11.1	74	0	000		29.12			30.31	AA	30.24
07	2152	12	CLR	10.00		18	-7.8	17	-8.5	13	-10.6	81	0	000		29.12			30.30	AA	30.24
07	2252	12	CLR	8.00		15	-9.4	14	-10.0	11	-11.7	84	0	000		29.11			30.29	AA	30.23
07	2352	12	CLR	10.00		14	-10.0	13	-10.4	11	-11.7	88	0	000		29.10			30.28	AA	30.22
08	0052	12	CLR	10.00		14	-10.0	13	-10.5	10	-12.2	84	3	010		29.09			30.27	AA	30.21
08	0152	12	CLR	9.00		14	-10.0	13	-10.5	10	-12.2	84	3	010		29.10			30.28	AA	30.22
08	0252	12	CLR	10.00		16	-8.9	15	-9.4	12	-11.1	84	0	000		29.10			30.27	AA	30.22

08	0352	12	CLR	10.00		13	-10.6	12	-10.8	11	-11.7	92	0	000		29.09			30.27	AA		30.21
08	0452	12	CLR	10.00		13	-10.6	12	-11.1	9	-12.8	84	0	000		29.10			30.28	AA		30.22
08	0552	12	CLR	9.00		12	-11.1	11	-11.6	8	-13.3	84	0	000		29.11			30.30	AA		30.23
08	0652	12	CLR	9.00		12	-11.1	11	-11.5	9	-12.8	88	0	000		29.13			30.32	AA		30.25
08	0752	12	SCT018	10.00		15	-9.4	14	-9.8	12	-11.1	88	3	010		29.12			30.31	AA		30.24
08	0810	12	BKN020	10.00		16	-8.9	15	-9.3	13	-10.6	88	0	000		29.12			M	SP		30.24
08	0852	12	OVC021	10.00		20	-6.7	19	-7.4	15	-9.4	81	3	020		29.14			30.32	AA		30.26
08	0952	12	OVC023	10.00		26	-3.3	23	-4.9	17	-8.3	69	3	030		29.15			30.33	AA		30.27
08	1052	12	FEW017 OVC023	9.00		29	-1.7	25	-3.8	17	-8.3	61	0	000		29.13			30.32	AA		30.25
08	1152	12	SCT016 OVC022	10.00		30	-1.1	27	-2.9	20	-6.7	66	5	VR		29.12			30.31	AA		30.24
08	1207	12	BKN014 OVC022	10.00		31	-0.6	27	-2.6	20	-6.7	64	3	020		29.13			M	SP		30.25
08	1219	12	SCT014 OVC022	10.00		31	-0.6	27	-2.6	20	-6.7	64	3	VR		29.13			M	SP		30.25
08	1252	12	BKN017 OVC022	10.00		32	0.0	28	-2.1	21	-6.1	64	0	000		29.12			30.30	AA		30.24
08	1349	12	BKN014 OVC020	10.00		32	0.0	29	-1.7	23	-5.0	69	0	000		29.11			M	SP		30.23
08	1352	12	BKN014 OVC023	10.00		32	0.0	29	-1.7	23	-5.0	69	3	360		29.11			30.29	AA		30.23
08	1419	12	SCT014 OVC025	10.00		32	0.0	29	-1.6	24	-4.4	72	3	VR		29.10			M	SP		30.22
08	1452	12	BKN014 OVC024	10.00		33	0.6	30	-1.2	24	-4.4	70	0	000		29.11			30.29	AA		30.23
08	1552	12	BKN012 OVC022	10.00		32	0.0	29	-1.4	25	-3.9	75	0	000		29.11			30.29	AA		30.23
08	1652	12	BKN012 OVC019	10.00		32	0.0	30	-1.0	27	-2.8	82	0	000		29.10			30.28	AA		30.22
08	1752	12	OVC013	10.00		33	0.6	31	-0.2	29	-1.7	85	0	000		29.10			30.29	AA		30.22
08	1852	12	BKN012 OVC017	10.00		33	0.6	32	-0.0	30	-1.1	89	3	VR		29.10			30.28	AA		30.22
08	1929	12	OVC009	8.00		33	0.6	32	-0.0	30	-1.1	89	0	000		29.11			M	SP		30.23
08	1952	12	OVC009	8.00		33	0.6	32	-0.0	30	-1.1	89	0	000		29.12			30.30	AA		30.24
08	2030	12	OVC013	10.00		33	0.6	32	-0.0	30	-1.1	89	3	VR		29.11			M	SP		30.23
08	2052	12	OVC014	10.00		33	0.6	32	-0.0	30	-1.1	89	0	000		29.11			30.29	AA		30.23
08	2150	12	OVC015	10.00		34	1.0	32	-0.1	28	-2.0	79	0	000		29.11			M	SP		30.23
08	2152	12	OVC015	10.00		34	1.1	32	0.0	29	-1.7	82	3	VR		29.11			30.28	AA		30.23
08	2227	12	OVC014	10.00		34	1.1	32	0.0	29	-1.7	82	3	VR		29.12			M	SP		30.24
08	2252	12	OVC014	5.00	-SN BR	34	1.1	32	0.2	30	-1.1	85	5	VR		29.12			30.29	AA	T	30.24
08	2347	12	OVC011	2.50	-SN BR	34	1.0	32	0.2	30	-1.0	85	0	000		29.13			M	SP		30.25
08	2352	12	OVC011	2.50	-SN BR	33	0.6	32	0.1	31	-0.6	92	0	000		29.13			30.30	AA	T	30.25
09	0001	12	OVC009	2.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.13			M	SP		30.25
09	0028	12	OVC008	1.75	-SN BR	32	0.0	31	-0.4	30	-1.1	92	0	000		29.11			M	SP		30.23
09	0052	12	OVC008	1.50	-SN BR	33	0.6	32	0.1	31	-0.6	92	3	080		29.11			30.28	AA	0.01	30.23
09	0141	12	OVC007	2.00	-SN BR	33	0.6	32	0.1	31	-0.6	92	3	VR		29.10			M	SP		30.22
09	0152	12	OVC007	2.50	-SN BR	33	0.6	32	0.1	31	-0.6	92	0	000		29.10			30.27	AA	0.01	30.22
09	0205	12	OVC007	3.00	-SN BR	33	0.6	32	-0.0	30	-1.1	89	0	000		29.10			M	SP		30.22
09	0225	12	OVC006	2.50	-SN BR	33	0.6	32	0.1	31	-0.6	92	0	000		29.11			M	SP		30.23
09	0233	12	OVC006	3.00	-SN BR	33	0.6	32	-0.0	30	-1.1	89	0	000		29.10			M	SP		30.22
09	0252	12	OVC007	3.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.10			30.27	AA	T	30.22
09	0317	12	OVC005	3.00	-SN BR	32	0.0	31	-0.4	30	-1.1	92	3	VR		29.10			M	SP		30.22
09	0324	12	OVC005	2.50	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.10			M	SP		30.22
09	0341	12	OVC006	2.50	-SN BR	32	0.0	31	-0.4	30	-1.1	92	0	000		29.09			M	SP		30.21
09	0352	12	OVC006	2.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.09			30.26	AA	T	30.21
09	0452	12	OVC006	2.50	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.10			30.27	AA	T	30.22
09	0519	12	OVC009	4.00	-SN BR	32	0.0	31	-0.4	30	-1.1	92	0	000		29.08			M	SP		30.20
09	0552	12	OVC007	3.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.09			30.26	AA	T	30.21
09	0652	12	OVC009	6.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.10			30.27	AA	T	30.22
09	0711	12	BKN006 OVC010	2.50	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.10			M	SP		30.22
09	0720	12	BKN008 OVC012	3.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		29.09			M	SP		30.21
09	0752	12	OVC006	9.00		32	0.0	32	-0.2	31	-0.6	96	0	000		29.09			30.26	AA	T	30.21
09	0828	12	OVC005	10.00		33	0.6	32	0.1	31	-0.6	92	0	000		29.10			M	SP		30.22
09	0847	12	OVC004	6.00	BR	34	1.0	32	0.2	30	-1.0	85	0	000		29.11			M	SP		30.23
09	0852	12	OVC004	6.00	BR	33	0.6	32	0.1	31	-0.6	92	0	000		29.11			30.28	AA		30.23
09	0935	12	OVC005	10.00		33	0.6	32	0.1	31	-0.6	92	0	000		29.12			M	SP		30.24
09	0952	12	OVC005	10.00		33	0.6	33	0.3	32	0.0	96	5	VR		29.12			30.29	AA		30.24
09	1011	12	OVC004	10.00		33	0.6	33	0.3	32	0.0	96	5	130		29.12			M	SP		30.24
09	1052	12	OVC004	10.00		34	1.1	33	0.6	32	0.0	92	0	000		29.14			30.31	AA		30.26
09	1152	12	OVC004	9.00		34	1.1	33	0.6	32	0.0	92	3	VR		29.09			30.26	AA	T	30.21
09	1223	12	OVC005	10.00		35	1.7	34	1.2	33	0.6	92	3	VR		29.07			M	SP		30.19
09	1234	12	OVC008	10.00		35	1.7	34	0.9	32	0.0	89	5	VR		29.07			M	SP		30.19
09	1252	12	OVC009	10.00		35	1.7	34	0.9	32	0.0	89	3	VR		29.07			30.24	AA		30.19
09	1320	12	FEW007 BKN010 OVC095	10.00		35	1.7	34	0.9	32	0.0	89	3	150		29.07			M	SP		30.19
09	1340	12	BKN009 OVC065	10.00		35	1.7	34	0.9	32	0.0	89	5	VR		29.07			M	SP		30.19
09	1352	12	OVC009	10.00		35	1.7	34	0.9	32	0.0	89	3	VR		29.06			30.23	AA		30.18
09	1438	12	SCT010 OVC023	10.00		36	2.2	34	1.3	32	0.0	85	3	100		29.06			M	SP		30.18
09	1450	12	SCT008 OVC023	10.00		36	2.0	34	1.3	32	0.0	85	0	000		29.06			M	SP		30.18
09	1452	12	SCT008 OVC023	10.00		36	2.2	34	1.3	32	0.0	85	0	000		29.06			30.23	AA		30.18
09	1507	12	BKN008 OVC023	10.00		36	2.2	35	1.5	33	0.6	89	3	VR		29.06			M	SP		30.18
09	1550	12	OVC005	10.00		34	1.0	33	0.6	32	0.0	92	0	000		29.06			M	SP		30.18
09	1552	12	OVC005	10.00		34	1.1	33	0.6	32	0.0	92	3	060		29.06			30.23	AA		30.18
09	1607	12	OVC004	7.00		34	1.1	33	0.6	32	0.0	92	0	000		29.06			M	SP		30.18
09	1652	12	OVC002	3.00	BR	34	1.1	33	0.6	32	0.0	92	0	000		29.06			30.23	AA		30.18
09	1701	12	OVC002	2.00	BR	34	1.1	33	0.6	32	0.0	92	0	000		29.06			M	SP		30.18
09	1712	12	OVC002	1.50	BR	33	0.6	33	0.5	33	0.6	100	0	000		29.07			M	SP		30.19
09	1724	12	OVC002	3.00	BR	34	1.1	33	0.6	32	0.0	92	0	000		29.07			M	SP		30.19
09	1742	12	OVC002	2.00	-RA BR	34	1.1	33	0.6	32	0.0	92	0	000		29.07			M	SP		30.19
09	1750	12	OVC002	3.00	BR	34	1.0	34	1.1	34	1.0	100	0	000		29.07			M	SP		30.19
09	1752	12	OVC002	3.00	BR	34	1.1	33	0.6	32	0.0	92	0	000		29.07			30.24	AA	T	30.19
09	1828	12	OVC002	1.75	BR	34	1.1	34	0.8	33	0.6	96	3	VR		29.08			M	SP		30.20
09	1835	12	OVC002	1.00	BR	33	0.6	33	0.3	32	0.0	96	0	000		29.08			M	SP		30.20
09	1844	12	VV002	0.50	FG	33	0.6	33	0.5	33	0.6	100	0	000		29.09			M	SP		30.21
09	1852	12	VV002	0.50	FG	33	0.6	33	0.5	33	0.6	100	0	000		29.09			30.26	AA		30.21
09	1952	12	VV002	0.50	FG	33	0.6	33	0.5	33	0.6	100	0	000		29.08			30.25	AA		30.20
09	2052	12	VV002	0.25	FG	33	0.6	33	0.5	33	0.6	100	0	000		29.08			30.25	AA	T	30.20
09	2152	12	VV002	0.25	FG	33	0.6	33	0.3	32	0.0	96	0	000		29.08			30.25	AA		30.20
09	2250	12	VV003	1.00	BR	34	1.0	33	0.6	32	0.0	92	0	000		29.06			M	SP		30.18
09	2252	12	VV003	1.00	BR	33	0.6	33	0.3	32	0.0	96	0	000		29.06			30.23	AA		30.18
09	2300	12	VV003	0.75	BR	33	0.6	33	0.3	32	0.0	96	0	000		29.06			M	SP		30.18
09	2352	12	VV002	0.50	FG	33	0.6	33	0.3	32	0.0	96	0	000		29.05			30.21	AA		30.16
10	0052	12	VV002	0.50	FG	33	0.6	33	0.5	33	0.6	100	0	000		29.02			30.18	AA		30.13
10	0134	12	VV003	1.00	BR	33	0.6	33	0.3	32	0.0	96	0	000		29.00			M	SP		30.11
10	0148	12	OVC003	1.50	BR	34	1.0	34	1.1	34	1.0	100	0	000		29.00			M	SP		30.11
10	0152	12	OVC003	1.75	BR	33	0.6	33	0.5	33	0.6	100	0	000		28.99			30.15	AA		30.10
10	0202	12	OVC003	2.50	BR	33	0.6	33	0.5	33	0.6	100	0	000		29.00			M	SP		30.11
10	0225	12	OVC002	1.25	BR	35	1.7	35	1.6	35	1.7	100	0	000		28.99			M	SP		30.10
10	0235	12	OVC002	1.00	BR	36	2.2	36	1.9	35	1.7	96	0	000		28.99			M	SP		30.10
10	0250	12	OVC003	1.25	BR	36	2.0	36	2.2	36	2.0	100	0	000		28.97			M	SP		30.08
10	0252	12	OVC003	1.25	BR	36	2.2	36	1.9	35	1.7	96	0	000		28.97			30.12	AA		30.08
10	0258	12	OVC003	2.00	BR	36	2.2	36	1.9	35	1.7	96	3	VR		28.96			M	SP		30.07
10	0333	12	OVC004	3.00	BR	37	2.8	37	2.5	36	2.2	96	0	000		28.95			M	SP		30.06
10	0342	12	OVC005	2.50	BR	37	2.8	37	2.5	36	2.2	96	3	VR		28.96			M	SP		30.07
10	0352	12	OVC005	2.50	BR	37	2.8	37	2.5	36	2.2	96	0	000		28.95			30.10	AA		30.06
10	0410	12	OVC004	2.50	BR	37	2.8	37	2.5	36	2.2	96	3	VR		28.97			M	SP		30.08
10	0423	12	OVC004	1.50	BR	37	2.8	37	2.5	36	2.2	96	0	000		28.98			M	SP		30.09
10	0452	12	OVC004	1.75	BR	36	2.2	36	1.9	35	1.7	96	3	VR		28.92			30.07	AA		30.03
10	0502	12	OVC004	2.00	BR	37	2.8	37	2.5	36	2.2	96	0	000		28.91			M	SP		30.02

10	0529	12	OVC002	1.50	BR	36	2.2	36	2.2	36	2.2	100	0	000		28.90			M	SP		30.01							
10	0536	12	OVC002	1.25	BR	37	2.8	37	2.5	36	2.2	96	0	000		28.90			M	SP		30.01							
10	0547	12	OVC002	1.50	BR	37	3.0	37	2.5	36	2.0	96	3	VR		28.88			M	SP		29.99							
10	0552	12	OVC002	1.50	BR	37	2.8	37	2.5	36	2.2	96	3	010		28.87			30.02	AA		29.98							
10	0600	12	OVC002	1.00	BR	37	2.8	37	2.5	36	2.2	96	3	VR		28.87			M	SP		29.98							
10	0617	12	OVC002	1.50	BR	37	2.8	37	2.5	36	2.2	96	3	VR		28.86			M	SP		29.97							
10	0627	12	OVC002	2.00	BR	38	3.3	38	3.0	37	2.8	96		M		28.86			M	SP		29.97							
10	0639	12	OVC002	1.25	BR	38	3.3	38	3.0	37	2.8	96		M		28.86			M	SP		29.97							
10	0648	12	OVC002	1.00	BR	37	3.0	37	2.7	37	3.0	100	3	VR		28.85			M	SP		29.96							
10	0652	12	OVC002	1.00	BR	38	3.3	38	3.0	37	2.8	96	6	VR		28.85			30.00	AA		29.96							
10	0704	12	OVC003	1.25	-RA BR	38	3.3	38	3.0	37	2.8	96	8	070		28.83			M	SP		29.94							
10	0712	12	OVC003	2.00	-RA BR	38	3.3	38	3.0	37	2.8	96	3	VR		28.82			M	SP		29.93							
10	0750	12	OVC005	2.50	-RA BR	37	3.0	37	2.7	37	3.0	100	M	M		28.78			M	SP		29.89							
10	0752	12	OVC005	2.00	-RA BR	38	3.3	38	3.3	38	3.3	100		M		28.78			29.93	AA		0.02	29.89						
10	0801	12	OVC005	1.50	-RA BR	38	3.3	38	3.3	38	3.3	100		M		28.78			M	SP		29.89							
10	0814	12	OVC005	1.25	-RA BR	38	3.3	38	3.3	38	3.3	100	3	VR		28.77			M	SP		29.88							
10	0816	12	OVC004	1.00	-RA BR	38	3.3	38	3.3	38	3.3	100	7	VR		28.76			M	SP		29.87							
10	0825	12	OVC004	1.50	RA BR	39	3.9	39	3.8	39	3.9	100	5	VR		28.76			M	SP		29.87							
10	0838	12	BKN004 OVC010	2.00	RA BR	39	3.9	39	3.6	38	3.3	96	5	VR		28.75			M	SP		29.86							
10	0846	12	BKN006 OVC010	3.00	-RA BR	37	3.0	37	2.7	37	3.0	100	5	VR		28.75			M	SP		29.86							
10	0852	12	BKN006 OVC010	3.00	RA BR	38	3.3	38	3.0	37	2.8	96	3	VR		28.74			29.89	AA		0.07	29.85						
10	0902	12	BKN006 OVC010	1.75	-RA BR	38	3.3	38	3.0	37	2.8	96	5	VR		28.74			M	SP		29.84							
10	0907	12	BKN005 OVC010	1.25	-RA BR	38	3.3	38	3.0	37	2.8	96	6	VR		28.72			M	SP		29.83							
10	0914	12	OVC005	1.50	-RA BR	39	3.9	39	3.6	38	3.3	96	6	VR		28.71			M	SP		29.82							
10	0919	12	OVC004	1.25	-RA BR	39	3.9	39	3.6	38	3.3	96	0	000		28.71			M	SP		29.82							
10	0936	12	OVC004	1.00	BR	39	3.9	39	3.8	39	3.9	100	3	VR		28.71			M	SP		29.81							
10	0943	12	OVC003	0.75	-RA BR	40	4.4	40	4.1	39	3.9	96	5	VR		28.71			M	SP		29.81							
10	0952	12	OVC003	1.00	RA BR	40	4.4	40	4.1	39	3.9	96	5	VR		28.69			29.83	AA		0.05	29.80						
10	0959	12	OVC003	1.50	RA BR	40	4.4	40	4.1	39	3.9	96	0	000		28.68			M	SP		29.78							
10	1026	12	OVC008	3.00	RA BR	41	5.0	41	4.7	40	4.4	96	6	VR		28.66			M	SP		29.76							
10	1035	12	BKN005 OVC009	4.00	-RA BR	41	5.0	41	4.7	40	4.4	96	0	000		28.64			M	SP		29.74							
10	1050	12	OVC005	2.00	+RA BR	41	5.0	40	4.4	39	4.0	93	6	VR		28.59			M	SP		29.69							
10	1052	12	BKN004 OVC008	1.75	+RA BR	41	5.0	41	4.7	40	4.4	96	3	VR		28.59			29.73	AA		0.26	29.69						
10	1056	12	OVC006	1.25	+RA BR	42	5.6	42	5.2	41	5.0	96	6	VR		28.59			M	SP		29.69							
10	1113	12	OVC007	1.75	+RA BR	44	6.7	43	6.1	42	5.6	93	7	VR		28.54			M	SP		29.64							
10	1121	12	OVC007	3.00	-RA BR	45	7.2	45	6.9	44	6.7	96		M		28.53			M	SP		29.63							
10	1137	12	OVC008	2.00	RA BR	46	7.8	46	7.5	45	7.2	96	7	VR	17	28.51			M	SP		29.61							
10	1150	12	SCT009 OVC012	2.50	-RA BR	46	8.0	46	7.5	45	7.0	96	7	VR		28.48			M	SP		29.58							
10	1152	12	SCT008 OVC014	2.50	-RA BR	47	8.3	46	7.7	45	7.2	93	8	140		28.48			29.62	AA		0.22	29.58						
10	1210	12	SCT009 OVC016	2.50	RA BR	47	8.3	47	8.0	46	7.8	96	5	VR		28.46			M	SP		29.56							
10	1238	12	FEW009 BKN018 OVC042	4.00	-RA BR	48	8.9	47	8.3	46	7.8	93	7	130		28.42			M	SP		29.52							
10	1252	12	BKN009 OVC018	4.00	-RA BR	48	8.9	47	8.3	46	7.8	93	7	VR		28.40			29.53	AA		0.05	29.50						
10	1300	12	SCT007 OVC010	2.50	BR	48	8.9	47	8.3	46	7.8	93	8	130	18	28.40			M	SP		29.49							
10	1307	12	OVC007	2.00	BR	47	8.3	47	8.0	46	7.8	96	5	VR	17	28.38			M	SP		29.48							
10	1321	12	OVC007	4.00	-RA BR	48	8.9	47	8.3	46	7.8	93	10	140		28.37			M	SP		29.46							
10	1328	12	OVC006	1.75	-RA BR	47	8.3	47	8.0	46	7.8	96	7	VR	18	28.35			M	SP		29.45							
10	1335	12	OVC004	2.00	-RA BR	47	8.3	47	8.0	46	7.8	96	6	VR		28.35			M	SP		29.45							
10	1348	12	OVC004	4.00	BR	46	8.0	46	7.7	46	8.0	100	9	160		28.34			M	SP		29.43							
10	1352	12	OVC004	3.00	BR	47	8.3	46	8.0	46	7.8	96	5	VR		28.33			29.46	AA		0.01	29.42						
10	1359	12	OVC004	2.00	BR	48	8.9	47	8.6	47	8.3	96	8	120		28.33			M	SP		29.42							
10	1408	12	OVC006	2.50	-RA BR	48	8.9	47	8.3	46	7.8	93	3	VR		28.32			M	SP		29.41							
10	1419	12	BKN004 OVC008	1.75	-RA BR	48	8.9	47	8.6	47	8.3	96	8	130	17	28.32			M	SP		29.41							
10	1438	12	OVC004	3.00	-RA BR	49	9.4	48	9.1	48	8.9	96	6	VR	17	28.30			M	SP		29.39							
10	1450	12	SCT004 BKN011 OVC018	10.00		48	9.0	47	8.3	46	8.0	93	5	VR		28.30			M	SP		29.39							
10	1452	12	SCT004 BKN013 OVC018	10.00		49	9.4	48	8.8	47	8.3	93	5	VR		28.29			29.41	AA		0.02	29.38						
10	1503	12	BKN006 OVC018	10.00		49	9.4	48	9.1	48	8.9	96	6	VR		28.28			M	SP		29.37							
10	1524	12	OVC004	2.50	-RA BR	49	9.4	48	9.1	48	8.9	96	7	170		28.27			M	SP		29.36							
10	1544	12	OVC006	4.00	-RA BR	50	10.0	49	9.7	49	9.4	96	6	140		28.24			M	SP		29.33							
10	1552	12	BKN006 OVC013	7.00	-RA	50	10.0	49	9.7	49	9.4	96	6	150		28.24			29.35	AA		0.03	29.33						
10	1628	12	OVC005	6.00	BR	52	11.1	51	10.8	51	10.6	96	9	150		28.21			M	SP		29.30							
10	1649	12	BKN004 OVC010	7.00		52	11.0	52	11.1	52	11.0	100	8	160		28.19			M	SP		29.28							
10	1652	12	BKN004 OVC010	8.00		52	11.1	51	10.8	51	10.6	96	8	140		28.18			29.30	AA		T	29.27						
10	1659	12	BKN005 OVC010	9.00		52	11.1	51	10.8	51	10.6	96	8	150		28.17			M	SP		29.26							
10	1741	12	OVC007	9.00		52	11.1	51	10.8	51	10.6	96	10	180		28.18			M	SP		29.27							
10	1752	12	BKN006 OVC013	10.00		53	11.7	52	11.3	52	11.1	96	14	170	20	28.17			29.28s	AA		29.26							
10	1807	12	FEW006 BKN016 BKN027	10.00		53	11.7	52	11.3	52	11.1	96	15	170	20	28.16			M	SP		29.25s							
10	1839	12	FEW014 BKN041 OVC050	4.00	-RA BR	49	9.4	47	8.3	45	7.2	86	9	220	33	28.20			M	SP		29.29							
10	1852	12	FEW017 BKN041 OVC055	10.00	-RA	49	9.4	47	8.3	45	7.2	86	11	200	24	28.20			29.31	AA		0.05	29.29						
10	1952	12	SCT100 BKN120	10.00		47	8.3	45	7.2	43	6.1	86	9	190		28.19			29.31s	AA		0.01	29.28s						
10	2050	12	BKN028	10.00		45	7.0	44	6.6	43	6.0	93	7	200		28.21			M	SP		29.30							
10	2052	12	SCT028	10.00		45	7.2	44	6.6	43	6.1	93	6	200		28.21			29.33	AA		29.30							
10	2152	12	FEW085	10.00		43	6.1	42	5.5	41	5.0	93	6	200		28.21			29.33	AA		29.30							
10	2250	12	BKN027	10.00		45	7.0	44	6.6	43	6.0	93	9	200	16	28.23			M	SP		29.32							
10	2252	12	BKN025	10.00		44	6.7	43	6.1	42	5.6	93	9	210	16	28.23			29.35	AA		29.32							
10	2329	12	FEW013 BKN025 OVC033	10.00	-RA	38	3.3	36	2.1	33	0.6	82	13	270	25	28.27			M	SP		29.36							
10	2336	12	FEW016 SCT023 OVC039	10.00	-RA	38	3.3	36	1.9	32	0.0	79	14	270	25	28.27			M	SP		29.36							
10	2352	12	SCT041 BKN049	10.00		37	2.8	34	1.2	30	-1.1	76	9	250	22	28.29			29.41	AA		0.02	29.38						
11	0052	12	FEW029	10.00		34	1.1	30	-0.9	24	-4.4	67	13	270	28	28.32			29.44	AA		29.41							
11	0152	12	OVC034	10.00		33	0.6	29	-1.6	22	-5.6	64	8	260	20	28.35			29.49	AA		29.45							
11	0252	12	OVC036	10.00		32	0.0	28	-2.3	20	-6.7	61	9	280	30	28.40			29.52	AA		29.49							
11	0352	12	CLR	10.00		30	-1.1	25	-3.9	14	-10.0	51	10	280	23	28.43			29.56	AA		29.53							
11	0452	12	CLR	10.00		28	-2.2	23	-4.9	12	-11.1	51	17	270	32	28.46			29.60	AA		29.56							
11	0552	12	CLR	10.00		26	-3.3	21	-6.0	9	-12.8	48	10	270	22	28.50			29.64	AA		29.60							
11	0652	12	CLR	10.00		24	-4.4	19	-7.0	7	-13.9	48	6	270	26	28.54			29.67	AA		29.64							
11	0752	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	13	280	23	28.56			29.70	AA		29.66							
11	0852	12	CLR	10.00		24	-4.4	19	-7.4	3	-16.1	40	16	260	30	28.60			29.74	AA		29.70							
11	0952	12	CLR	10.00		25	-3.9	19	-7.1	2	-16.7	37	14	270	32	28.62			29.76	AA		29.72							
11	1052	12	CLR	10.00		26	-3.3	20	-6.7	3	-16.1	37	11	250	26	28.62			29.76	AA		29.72							
11	1152	12	CLR	10.00		26	-3.3	20	-6.7	2	-16.7	35	18	250	30	28.62			29.77	AA		29.72							
11	1252	12	CLR	10.00		26	-3.3	19	-7.0	-1	-18.3	31	15	280	29	28.63			29.78	AA		29.73							
11	1352	12	CLR	10.00		26	-3.3	19	-6.9	-0	-17.8	32	18	270	28	28.65			29.80	AA		29.75							
11	1452	12	FEW065	10.00		26	-3.3	20	-6.8	1	-17.2	34	10	280	18	28.67			29.83	AA		29.77							
11	1552	12	CLR	10.00		25	-3.9	19	-7.3	-0	-17.8	33	10	290	18	28.71			29.86	AA		29.81							
11	1652	12	CLR	10.00		23	-5.0	18	-7.9	2	-16.7	40	7	VR	18	28.74			29.89	AA		29.84							
11	1752	12	CLR	10.00		22	-5.6	17	-8.3	2	-16.7	42	8	280	16	28.77			29.93	AA		29.88							
11	1852	12	CLR	10.00		22	-5.6	17	-8.2	3	-16.1	44	6	VR		28.80			29.97	AA		29.91							
11	1952	12	CLR	10.00		21	-6.1	16	-8.6	2	-16.7	43	7	VR	17	28.83			30.00	AA		29.94							
11	2052	12	CLR	10.00		20	-6.7	15	-9.2	-0	-17.8	41	11	260	18	28.84			30.02	AA		29.95							
11	2152	12	CLR	10.00		19	-7.2	15	-9.3	3	-16.1	49	3	210		28.87			30.04	AA		29.98							
11	2252	12	CLR	10.00		18	-7.8	15	-9.6	4	-15.6	54	3	080		28.88			30.05	AA		29.99							
11	2352	12	CLR	10.00		18	-7.8	15	-9.6	4	-15.6	54	6	270		28.88			30.06	AA		29.99							
12	0052	12	CLR	10.00		18	-7.8	15	-9.6	4	-15.6	54	0	000		28.89			30.06	AA		30.00							
12	0152	12	CLR	10.00		16	-8.9	14	-10.1	7	-13.9	67	0	000		28.89			30.07	AA		30.00							
12	0252	12	CLR	10.00		14	-10.0	12	-10.9	7	-13.9	74	0	000		28.90			30.08	AA		30.01							
12	0352	12	CLR	10.00		15	-9.4	13	-10.5	7	-13.9	70	0	000		28.89			30.07	AA		30.00							
12	0452	12	CLR	10.00		14	-10.0	13	-10.8	8	-13.3	77	0	000		28.89			30.06	AA		30.00							
12	0552	12	CLR	10.00		15	-9.4	13	-10.2	9	-12.8	77	0	000		28.89			30.06	AA		30.00							

12	0652	12	CLR	10.00		15	-9.4	13	-10.4	8	-13.3	74	0	000		28.88			30.06	AA		29.99
12	0752	12	FEW120	10.00		15	-9.4	13	-10.2	9	-12.8	77	0	000		28.87			30.05	AA		29.98
12	0852	12	CLR	10.00		19	-7.2	16	-9.0	6	-14.4	57	6	170		28.85			30.02	AA		29.96
12	0952	12	CLR	10.00		21	-6.1	17	-8.3	5	-15.0	50	9	180		28.83			30.01	AA		29.94
12	1052	12	BKN090	10.00		23	-5.0	18	-7.5	6	-14.4	48	8	180		28.79			29.96	AA		29.90
12	1152	12	OVC065	10.00		26	-3.3	21	-6.1	8	-13.3	46	6	170		28.74			29.90	AA		29.84
12	1252	12	FEW045 BKN060 OVC080	10.00		27	-2.8	22	-5.4	11	-11.7	51	8	160		28.69			29.85	AA		29.79
12	1352	12	FEW048 OVC060	10.00		28	-2.2	23	-4.9	12	-11.1	51	8	160		28.64			29.80	AA		29.74
12	1452	12	BKN049 OVC060	10.00		29	-1.7	24	-4.2	14	-10.0	53	8	150		28.61			29.77	AA		29.71
12	1552	12	OVC045	10.00		28	-2.2	24	-4.5	15	-9.4	58	6	150		28.58			29.74	AA		29.68
12	1616	12	OVC028	2.50	-SN	28	-2.2	25	-4.0	18	-7.8	66	6	VR		28.56			M	SP		29.66
12	1621	12	OVC022	1.25	-SN	27	-2.8	24	-4.2	19	-7.2	72	3	VR		28.57			M	SP		29.67
12	1629	12	VV019	0.75	-SN	27	-2.8	25	-4.0	20	-6.7	75	3	VR		28.56			M	SP		29.66
12	1637	12	OVC018	1.25	-SN	26	-3.3	24	-4.2	21	-6.1	81	3	VR		28.56			M	SP		29.66
12	1652	12	OVC018	1.25	-SN BR	26	-3.3	25	-4.0	22	-5.6	85	0	000		28.55			29.71	AA	T	29.65
12	1714	12	VV014	1.00	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.53			M	SP		29.63
12	1722	12	VV013	0.75	-SN BR	26	-3.3	25	-3.7	24	-4.4	92	0	000		28.53			M	SP		29.63
12	1744	12	BKN012 OVC022	1.25	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.52			M	SP		29.62
12	1750	12	BKN012 OVC016	1.00	-SN BR	27	-3.0	26	-3.5	23	-5.0	85	0	000		28.52			M	SP		29.62
12	1752	12	VV012	1.00	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.51			29.67	AA	0.03	29.61
12	1759	12	BKN010 OVC015	0.75	-SN BR	25	-3.9	24	-4.4	22	-5.6	88	0	000		28.51			M	SP		29.61
12	1805	12	SCT010 OVC015	1.00	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.51			M	SP		29.61
12	1820	12	OVC013	1.00	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	3	070		28.50			M	SP		29.60
12	1823	12	SCT009 OVC013	0,75	-SN BR	25	-3,9	24	-4,2	23	-5,0	92	0	000		28,51			M	SP		29,61
12	1845	12	BKN012 OVC020	1.00	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	0	000		28.49			M	SP		29.59
12	1852	12	BKN012 OVC020	1.25	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	3	320		28.50			29.66	AA	0.03	29.60
12	1909	12	BKN013 OVC020	2.00	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	3	030		28.49			M	SP		29.59
12	1921	12	OVC013	1.25	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.49			M	SP		29.59
12	1926	12	OVC012	0.75	-SN BR	26	-3.3	25	-3.9	23	-5.0	88	0	000		28.49			M	SP		29.59
12	1932	12	FEW007 OVC012	1.00	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	5	300		28.49			M	SP		29.59
12	1936	12	BKN009 OVC012	1.25	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	0	000		28.49			M	SP		29.59
12	1939	12	OVC012	1.00	-SN BR	25	-3.9	25	-4.0	24	-4.4	96	3	VR		28.49			M	SP		29.59
12	1950	12	FEW007 OVC013	0.75	-SN BR	27	-3.0	26	-3.1	25	-4.0	92	0	000		28.48			M	SP		29.58
12	1952	12	FEW007 OVC013	0.75	-SN BR	26	-3.3	25	-3.7	24	-4.4	92	0	000		28.48			29.64	AA	0.02	29.58
12	2009	12	BKN009 OVC014	1.25	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	0	000		28.47			M	SP		29.57
12	2012	12	BKN009 BKN014 OVC033	2.00	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	0	000		28.46			M	SP		29.56
12	2016	12	SCT009 BKN014 BKN033	4.00	-SN BR	25	-3.9	24	-4.2	23	-5.0	92	0	000		28.46			M	SP		29.56
12	2021	12	SCT009 BKN031	6.00	BR	25	-3.9	25	-4.0	24	-4.4	96	0	000		28.46			M	SP		29.56
12	2035	12	SCT011 BKN026 OVC031	10.00		25	-3.9	24	-4.4	22	-5.6	88	0	000		28.45			M	SP		29.55
12	2052	12	BKN011 BKN016 OVC024	10.00		25	-3.9	25	-4.0	24	-4.4	96	0	000		28.45			29.61	AA	0.01	29.55
12	2140	12	FEW007 BKN012 OVC025	10.00		25	-3.9	24	-4.2	23	-5.0	92	0	000		28.43			M	SP		29.53
12	2149	12	SCT010 BKN016 OVC024	10.00		25	-4.0	24	-4.2	23	-5.0	92	0	000		28.43			M	SP		29.53
12	2152	12	SCT010 BKN017 OVC024	10.00		25	-3.9	24	-4.2	23	-5.0	92	0	000		28.42			29.58	AA		29.52
12	2201	12	BKN010 BKN019 OVC024	10.00		25	-3.9	24	-4.2	23	-5.0	92	0	000		28.42			M	SP		29.52
12	2215	12	BKN008 OVC024	10.00		25	-3.9	24	-4.2	23	-5.0	92	0	000		28.42			M	SP		29.52
12	2231	12	SCT008 OVC024	10.00		25	-3.9	24	-4.2	23	-5.0	92	0	000		28.41			M	SP		29.51
12	2252	12	OVC024	10.00		23	-5.0	23	-5.1	22	-5.6	96	0	000		28.40			29.56	AA		29.50
12	2309	12	SCT024 SCT032	7.00		23	-5.0	22	-5.3	21	-6.1	92	3	190		28.40			M	SP		29.49
12	2352	12	CLR	7.00		18	-7.8	17	-8.1	16	-8.9	92	0	000		28.38			29.53	AA		29.47
13	0007	12	FEW003 SCT034	9.00		16	-8.9	16	-9.0	15	-9.4	96	3	210		28.38			M	SP		29.47
13	0027	12	FEW005 BKN030 OVC037	1.75	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	15	240	25	28.38			M	SP		29.48
13	0029	12	SCT005 BKN022 OVC037	0.75	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	22	250	41	28.40			M	SP		29.49
13	0040	12	SCT016 BKN024 OVC080	1.25	-SN BR	22	-5.6	21	-6.0	19	-7.2	88	14	270	24	28.40			M	SP		29.49
13	0042	12	FEW012 BKN022 OVC085	2.00	-SN BR	21	-6.1	20	-6.6	18	-7.8	88	14	260	24	28.40			M	SP		29.49
13	0046	12	FEW012 BKN034 OVC085	4.00	-SN BR	21	-6.0	20	-6.6	18	-8.0	88	10	260	24	28.40			M	SP		29.49
13	0052	12	FEW012 SCT018 BKN085	8.00		21	-6.1	19	-6.9	16	-8.9	81	8	270	20	28.40			29.55	AA	T	29.49
13	0152	12	BKN070	10.00		20	-6.7	18	-7.9	12	-11.1	71	10	270		28.40			29.56	AA		29.50
13	0252	12	FEW034 FEW090	10.00		20	-6.7	17	-8.1	10	-12.2	65	5	260	17	28.42			29.58	AA		29.52
13	0352	12	OVC034	10.00		19	-7.2	17	-8.5	10	-12.2	68	11	260	17	28.43			29.58	AA		29.53
13	0452	12	BKN034 OVC048	10.00		20	-6.7	18	-7.9	12	-11.1	71	10	250	17	28.45			29.60	AA		29.55
13	0552	12	BKN033 OVC044	10.00		20	-6.7	17	-8.0	11	-11.7	68	8	270	22	28.45			29.61	AA	T	29.55
13	0652	12	OVC034	10.00		20	-6.7	17	-8.3	9	-12.8	62	11	260	25	28.48			29.64	AA	T	29.58
13	0752	12	FEW042	9.00		20	-6.7	16	-8.6	6	-14.4	54	13	270	28	28.53			29.69	AA	T	29.63
13	0852	12	CLR	10.00		20	-6.7	16	-8.9	4	-15.6	50	13	290	29	28.54			29.70	AA		29.64
13	0952	12	BKN046	6.00	UP	20	-6.7	16	-8.9	4	-15.6	50	16	260	36	28.57			29.73	AA	T	29.67
13	1034	12	FEW001	4.00	UP	20	-6.7	16	-9.1	2	-16.7	45	18	270	34	28.58			M	SP		29.68
13	1052	12	FEW047	6.00	UP	21	-6.1	16	-8.7	2	-16.7	43	22	280	34	28.58			29.75	AA	T	29.68
13	1152	12	CLR	10.00		21	-6.1	16	-8.8	1	-17.2	41	11	290	28	28.60			29.76	AA	T	29.70
13	1252	12	CLR	10.00		22	-5.6	17	-8.4	1	-17.2	40	20	270	26	28.62			29.78	AA		29.72
13	1352	12	CLR	10.00		22	-5.6	17	-8.5	-1	-18.3	36	10	300	22	28.62			29.78	AA		29.72
13	1452	12	CLR	10.00		22	-5,6	16	-8.6	-2	-18.9	35	11	280	23	28.64			29.80	AA		29.74
13	1552	12	FEW060	10.00		21	-6.1	16	-9.0	-2	-18.9	36	7	VR	20	28.67			29.83	AA		29.77
13	1652	12	CLR	10.00		19	-7.2	14	-9.8	-2	-18.9	39	7	290		28.68			29.84	AA		29.78
13	1752	12	CLR	10.00		18	-7.8	13	-10.3	-3	-19.4	39		M		28.69			29.86	AA		29.79
13	1852	12	CLR	10.00		17	-8.3	13	-10.6	-2	-18.9	43	7	290		28.71			29.88	AA		29.82
13	1952	12	CLR	10.00		17	-8.3	13	-10.6	-2	-18.9	43	7	260		28.74			29.90	AA		29.84
13	2052	12	CLR	10.00		16	-8.9	12	-10.9	-1	-18.3	47	8	280		28.74			29.91	AA		29.84
13	2152	12	CLR	10.00		15	-9.4	12	-11.3	-1	-18.3	49	8	270		28.72			29.89	AA		29.83
13	2252	12	CLR	10.00		15	-9.4	12	-11.1	1	-17.2	54	6	240		28.72			29.90	AA		29.83
13	2352	12	CLR	10.00		15	-9.4	12	-11.0	2	-16.7	56	3	240		28.72			29.89	AA		29.83
14	0052	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	6	190		28.71			29.88	AA		29.81
14	0152	12	FEW030	10.00		13	-10.6	11	-11.7	4	-15.6	67	5	180		28.71			29.89	AA		29.82
14	0252	12	CLR	10.00		12	-11.1	10	-12.1	4	-15.6	70	3	190		28.71			29.88	AA		29.81
14	0352	12	BKN110	10.00		13	-10.6	11	-11.4	6	-14.4	73	3	200		28.69			29.87	AA		29.80
14	0452	12	FEW065 SCT080 BKN095	10.00		14	-10.0	12	-11.0	6	-14.4	70	6	200		28.69			29.86	AA		29.79
14	0552	12	BKN080 OVC110	10.00		14	-10.0	12	-11.0	6	-14.4	70	7	200		28.69			29.87	AA		29.80
14	0652	12	OVC044	7.00	-SN	15	-9.4	13	-10.6	6	-14.4	67	7	200		28.71			29.88	AA	T	29.81
14	0752	12	BKN070 OVC085	8.00	-SN	15	-9.4	13	-10.5	7	-13.9	70	6	230		28.71			29.88	AA	T	29.81
14	0850	12	BKN041 OVC050	2.50	-SN	16	-9.0	14	-9.8	9	-13.0	74	5	VR		28.71			M	SP		29.82
14	0852	12	BKN041 OVC050	3.00	-SN	15	-9.4	13	-10.2	9	-12.8	77	7	210		28.71			29.89	AA	T	29.82
14	0952	12	FEW017 OVC032	7.00		17	-8.3	15	-9.3	10	-12.2	74	6	210		28.71			29.89	AA	T	29.82
14	1011	12	BKN019 OVC028	8.00	-SN	18	-7.8	16	-8.9	10	-12.2	71	6	VR		28.71			M	SP		29.81
14	1043	12	SCT021	10.00		19	-7.2	16	-8.7	9	-12.8	65	8	270		28.69			M	SP		29.80
14	1052	12	FEW023	10.00		19	-7.2	16	-8.7	9	-12.8	65	9	200		28.69			29.86	AA	T	29.79
14	1152	12	CLR	10.00		21	-6.1	18	-8.0	8	-13.3	57	9	280		28.68			29.84	AA		29.78
14	1252	12	CLR	10.00		22	-5.6	18	-7.6	8	-13.3	55	8	290		28.66			29.83	AA		29.76
14	1352	12	CLR	10.00		24	-4.4	20	-6.9	8	-13.3	50	11	290		28.66			29.83	AA		29.76
14	1452	12	OVC039	10.00		24	-4.4	20	-6.7	9	-12.8	53	6	VR		28.69			29.85	AA		29.79
14	1552	12	FEW041	10.00		23	-5.0	19	-7.1	9	-12.8	55	6	250		28.69			29.87	AA		29.80
14	1652	12	CLR	10.00		23	-5.0	19	-7.1	9	-12.8	55	3	VR		28.72			29.89	AA		29.83
14	1752	12	CLR	10.00		21	-6.1	18	-7.8	10	-12.2	62	5	200		28.74			29.92	AA		29.85
14	1852	12	SCT050	10.00		17	-8.3	15	-9.4	9	-12.8	71	0	000		28.77			29.96	AA		29.88
14	1952	12	OVC041	10.00		18	-7.8	16	-8.6	12	-11.1	77	3	180		28.78			29.96	AA		29.89
14	2052	12	BKN032 OVC045	10.00		17	-8.3	15	-9.2	11	-11.7	77	0	000		28.78			29.96	AA		29.89
14	2150	12	BKN029 BKN037	10.00		16	-9.0	14	-9.7	10	-12.0	77	3	180		28.80			M	SP		29.91
14	2152	12	SCT029 BKN037	10.00		16	-8.9	15	-9.6	11	-11.7	81	3	190		28.80			29.98	AA		29.91
14	2252	12	BKN034 OVC045	10.00		17	-8.3	16	-9.0	12	-11.1	81	0	000		28.80			29.98	AA		29.91

14	2352	12	OVC038	10.00		17	-8.3	16	-8.9	13	-10.6	84	0	000		28.79			29.96	AA		29.90
15	0052	12	OVC032	9.00		19	-7.2	18	-7.8	15	-9.4	84	0	000		28.80			29.97	AA		29.91
15	0152	12	OVC038	10.00		21	-6.1	19	-6.9	16	-8.9	81	0	000		28.80			29.97	AA		29.91
15	0252	12	BKN030 OVC039	10.00		21	-6.1	20	-6.7	17	-8.3	84	0	000		28.80			29.97	AA		29.91
15	0352	12	OVC033	10.00		22	-5.6	20	-6.4	17	-8.3	81	3	190		28.81			29.98	AA		29.92
15	0452	12	OVC035	10.00		23	-5.0	21	-6.0	17	-8.3	78	3	220		28.81			29.98	AA		29.92
15	0552	12	OVC034	10.00		23	-5.0	21	-5.8	18	-7.8	81	0	000		28.83			30.00	AA		29.94
15	0652	12	OVC037	10.00		23	-5.0	22	-5.7	19	-7.2	85	0	000		28.84			30.01	AA		29.95
15	0752	12	OVC035	10.00		24	-4.4	22	-5.3	19	-7.2	81	0	000		28.83			30.00	AA		29.94
15	0852	12	OVC045	10.00		25	-3.9	23	-4.9	19	-7.2	78	0	000		28.83			30.01	AA		29.94
15	0952	12	OVC047	10.00		27	-2.8	25	-4.0	20	-6.7	75	0	000		28.84			30.02	AA		29.95
15	1052	12	OVC047	10.00		29	-1.7	26	-3.1	21	-6.1	72	0	000		28.81			29.98	AA		29.92
15	1152	12	FEW021 OVC050	10.00		32	0.0	28	-2.3	20	-6.7	61	7	180		28.79			29.96	AA		29.90
15	1252	12	OVC060	10.00		33	0.6	29	-1.6	22	-5.6	64	7	160		28.77			29.94	AA		29.88
15	1352	12	FEW050	10.00		34	1.1	29	-1.4	21	-6.1	59	5	110		28.74			29.90	AA		29.84
15	1452	12	BKN050	10.00		33	0.6	29	-1.6	22	-5.6	64	3	150		28.74			29.91	AA		29.85
15	1552	12	CLR	10.00		32	0.0	28	-2.1	21	-6.1	64	0	000		28.74			29.89	AA		29.84
15	1652	12	CLR	10.00		30	-1.1	27	-3.0	20	-6.7	66	0	000		28.72			29.88	AA		29.83
15	1713	12	BKN018	10.00		30	-1.1	27	-3.0	20	-6.7	66	0	000		28.72			M	SP		29.83
15	1752	12	OVC015	10.00		30	-1.1	27	-2.8	21	-6.1	69	0	000		28.74			29.90	AA		29.84
15	1833	12	OVC014	10.00		30	-1.1	27	-2.8	21	-6.1	69	3	VR		28.74			M	SP		29.85
15	1852	12	OVC011	10.00		30	-1.1	27	-2.6	22	-5.6	72	3	VR		28.74			29.89	AA		29.84
15	1952	12	OVC011	10.00		30	-1.1	28	-2.3	24	-4.4	78	3	VR		28.71			29.87	AA		29.82
15	2014	12	OVC009	10.00		30	-1.1	28	-2.3	24	-4.4	78	3	VR		28.71			M	SP		29.81
15	2052	12	OVC007	7.00		30	-1.1	29	-1.7	27	-2.8	89	3	VR		28.68			29.84	AA		29.78
15	2143	12	OVC005	10.00		30	-1.1	28	-2.1	25	-3.9	82	3	VR		28.65			M	SP		29.75
15	2152	12	OVC005	8.00		30	-1.1	28	-2.1	25	-3.9	82	0	000		28.64			29.79	AA		29.74
15	2244	12	OVC004	2.50	BR	28	-2.2	27	-2.6	26	-3.3	92	0	000		28.60			M	SP		29.70
15	2252	12	OVC003	1.75	BR	28	-2.2	27	-2.6	26	-3.3	92	5	VR		28.60			29.75	AA		29.70
15	2352	12	OVC002	1.75	BR	28	-2.2	28	-2.4	27	-2.8	96	5	VR		28.58			29.73	AA		29.68
16	0052	12	OVC002	1.75	BR	28	-2.2	27	-2.6	26	-3.3	92	3	010		28.52			29.67	AA		29.62
16	0152	12	OVC002	1.75	BR	27	-2.8	27	-2.9	26	-3.3	96	3	VR		28.50			29.64	AA		29.60
16	0159	12	OVC002	2.00	BR	27	-2.8	27	-2.9	26	-3.3	96	3	VR		28.49			M	SP		29.59
16	0252	12	OVC002	1.75	BR	27	-2.8	27	-2.9	26	-3.3	96	5	VR		28.45			29.60	AA		29.55
16	0352	12	OVC002	2.00	-FZRA BR	28	-2.2	28	-2.4	27	-2.8	96	6	VR		28.41			29.55	AA	T	29.51
16	0421	12	OVC002	3.00	-FZRA BR	28	-2.2	28	-2.4	27	-2.8	96	5	VR		28.38			M	SP		29.47
16	0452	12	OVC002	4.00	-FZRA BR	28	-2.2	28	-2.4	27	-2.8	96	6	VR		28.35			29.49	AA	0.03	29.45
16	0552	12	OVC002	4.00	-FZRA BR	29	-1.7	29	-1.8	28	-2.2	96	6	VR		28.33			29.47	AA	0.01	29.42
16	0652	12	OVC002	5.00	-FZRA BR	30	-1.1	30	-1.3	29	-1.7	96	6	VR		28.29			29.43	AA	0.06	29.38
16	0722	12	OVC002	5.00	UP BR	30	-1.1	30	-1.3	29	-1.7	96	7	VR		28.28			M	SP		29.37
16	0732	12	OVC002	5.00	-FZRA BR	30	-1.1	30	-1.3	29	-1.7	96	3	VR		28.28			M	SP		29.37
16	0748	12	OVC002	6.00	-SN BR	30	-1.0	29	-1.5	28	-2.0	92	6	VR		28.28			M	SP		29.37
16	0752	12	OVC002	6.00	UP BR	31	-0.6	30	-0.9	29	-1.7	92	3	VR		28.28			29.41	AA	0.02	29.37
16	0839	12	OVC003	2.00	-SN BR	31	-0.6	31	-0.7	30	-1.1	96	3	350		28.30			M	SP		29.39
16	0847	12	OVC003	1.25	-SN BR	30	-1.0	30	-1.1	30	-1.0	100	3	VR		28.31			M	SP		29.40
16	0852	12	OVC003	1.00	-SN BR	31	-0.6	31	-0.5	31	-0.6	100	0	000		28.31			29.45	AA	0.03	29.40
16	0903	12	OVC004	0.75	-SN BR	32	0.0	32	-0.2	31	-0.6	96	5	VR		28.32			M	SP		29.41
16	0952	12	OVC005	0.50	SN FG	32	0.0	32	-0.2	31	-0.6	96	3	VR		28.34			29.47	AA	0.08	29.43
16	1013	12	OVC005	1.25	-SN BR	32	0.0	32	-0.2	31	-0.6	96	0	000		28.34			M	SP		29.43
16	1019	12	OVC005	2.00	-SN BR	32	0.0	32	-0.2	31	-0.6	96	3	340		28.34			M	SP		29.43
16	1029	12	OVC005	4.00	-SN BR	32	0.0	32	0.0	32	0.0	100	3	VR		28.34			M	SP		29.43
16	1050	12	OVC006	8.00	UP	34	1.0	32	0.2	30	-1.0	85	5	VR		28.34			M	SP		29.43
16	1052	12	OVC006	8.00	UP	33	0.6	32	0.1	31	-0.6	92	3	VR		28.34			29.47	AA	0.04	29.43
16	1152	12	OVC006	10.00	UP	34	1.1	33	0.6	32	0.0	92	0	000		28.33			29.46	AA	0.01	29.42
16	1217	12	SCT007 OVC012	9.00		34	1.1	33	0.6	32	0.0	92	0	000		28.33			M	SP		29.42
16	1252	12	FEW005 SCT012 OVC055	10.00		34	1.1	33	0.6	32	0.0	92	0	000		28.33			29.47	AA	T	29.42
16	1306	12	BKN004 BKN010 OVC055	10.00		34	1.1	33	0.6	32	0.0	92	0	000		28.34			M	SP		29.43
16	1317	12	BKN006 OVC055	10.00		34	1.1	33	0.6	32	0.0	92	0	000		28.34			M	SP		29.43
16	1327	12	OVC005	10.00		34	1.1	33	0.6	32	0.0	92	0	000		28.34			M	SP		29.43
16	1352	12	OVC004	10.00		34	1.1	33	0.6	32	0.0	92	3	190		28.35			29.48	AA		29.44
16	1452	12	OVC004	10.00		35	1.7	34	1.2	33	0.6	92	5	210		28.37			29.50	AA		29.46
16	1550	12	SCT004 OVC023	10.00		36	2.0	35	1.7	34	1.0	92	7	190		28.38			M	SP		29.48
16	1552	12	SCT004 OVC023	10.00		35	1.7	35	1.4	34	1.1	96	6	190		28.38			29.52	AA		29.48
16	1641	12	FEW025	8.00		32	0.0	32	-0.2	31	-0.6	96	5	200		28.40			M	SP		29.49
16	1652	12	CLR	7.00		32	0.0	32	-0.2	31	-0.6	96	5	190		28.40			29.54	AA		29.50
16	1752	12	BKN050	10.00		33	0.6	33	0.3	32	0.0	96	6	180		28.44			29.58	AA		29.54
16	1852	12	OVC029	10.00		33	0.6	33	0.3	32	0.0	96	7	200		28.47			29.61	AA		29.57
16	1944	12	OVC031	10.00		35	1.7	34	0.9	32	0.0	89	5	200		28.49			M	SP		29.59
16	1952	12	OVC031	10.00		35	1.7	34	0.9	32	0.0	89	3	200		28.50			29.64	AA		29.60
16	2044	12	FEW020 BKN026 OVC033	10.00		35	1.7	34	0.9	32	0.0	89	6	190		28.52			M	SP		29.62
16	2052	12	OVC024	10.00		36	2.2	34	1.3	32	0.0	85	3	VR		28.52			29.66	AA		29.62
16	2152	12	OVC028	10.00		34	1.1	32	0.0	29	-1.7	82	7	240		28.54			29.68	AA		29.64
16	2227	12	OVC030	10.00		34	1.1	32	-0.1	28	-2.2	79	9	260		28.55			M	SP		29.65
16	2252	12	FEW027 SCT033	10.00		34	1.1	31	-0.3	27	-2.8	76	9	250	18	28.55			29.70	AA		29.65
16	2352	12	CLR	10.00		33	0.6	30	-1.0	25	-3.9	72	9	230		28.57			29.71	AA		29.67
17	0052	12	SCT030	10.00		32	0.0	29	-1.6	24	-4.4	72	9	240		28.58			29.72	AA		29.68
17	0111	12	BKN029	10.00		32	0.0	29	-1.8	23	-5.0	69	9	260	20	28.59			M	SP		29.69
17	0142	12	SCT026 OVC031	10.00		32	0.0	29	-1.6	24	-4.4	72	6	280		28.59			M	SP		29.69
17	0152	12	SCT030 OVC037	10.00		32	0.0	29	-1.6	24	-4.4	72	7	VR		28.59			29.73	AA		29.69
17	0252	12	FEW028 OVC038	10.00		31	-0.6	28	-2.3	22	-5.6	69	9	280	18	28.63			29.77	AA		29.73
17	0330	12	BKN028 OVC034	10.00		31	-0.6	28	-2.3	22	-5.6	69	3	VR		28.62			M	SP		29.72
17	0338	12	OVC030	10.00		31	-0.6	28	-2.3	22	-5.6	69	3	VR		28.63			M	SP		29.73
17	0350	12	OVC028	10.00		30	-1.0	27	-2.8	21	-6.0	69	5	VR		28.63			M	SP		29.73
17	0352	12	OVC028	10.00		31	-0.6	28	-2.3	22	-5.6	69	6	260		28.63			29.77	AA		29.73
17	0424	12	OVC030	10.00		30	-1.1	27	-2.6	22	-5.6	72	7	250		28.64			M	SP		29.74
17	0441	12	OVC029	10.00		30	-1.1	27	-2.6	22	-5.6	72	7	280		28.65			M	SP		29.75
17	0452	12	OVC029	10.00		30	-1.1	27	-2.6	22	-5.6	72	6	VR		28.65			29.80	AA		29.75
17	0552	12	BKN025	10.00		30	-1.1	27	-2.6	22	-5.6	72	6	VR		28.68			29.83	AA		29.78
17	0629	12	FEW027	10.00		29	-1.7	26	-3.3	20	-6.7	69	6	VR		28.67			M	SP		29.77
17	0652	12	CLR	10.00		28	-2.2	25	-3.8	19	-7.2	69	5	VR		28.69			29.84	AA		29.79
17	0752	12	CLR	10.00		27	-2.8	24	-4.4	18	-7.8	69	5	030		28.69			29.84	AA		29.79
17	0852	12	CLR	10.00		29	-1.7	25	-3.8	17	-8.3	61	8	330		28.71			29.85	AA		29.81
17	0952	12	CLR	10.00		30	-1.1	25	-3.7	15	-9.4	54	9	330	16	28.72			29.88	AA		29.83
17	1052	12	CLR	10.00		30	-1.1	25	-3.7	15	-9.4	54	7	330		28.74			29.90	AA		29.85
17	1152	12	CLR	10.00		30	-1.1	25	-3.6	16	-8.9	56	0	000		28.69			29.83	AA		29.79
17	1252	12	BKN110	10.00		29	-1.7	25	-3.8	17	-8.3	61	0	000		28.68			29.83	AA		29.78
17	1352	12	OVC100	10.00		29	-1.7	25	-3.8	17	-8.3	61	0	000		28.67			29.81	AA		29.77
17	1452	12	OVC100	10.00		29	-1.7	25	-3.6	18	-7.8	63	3	VR		28.65			29.80	AA		29.75
17	1552	12	OVC090	10.00		28	-2.2	24	-4.5	15	-9.4	58	3	VR		28.63			29.78	AA		29.73
17	1652	12	OVC095	10.00		27	-2.8	23	-5.0	14	-10.0	58	0	000		28.60			29.75	AA		29.70
17	1752	12	OVC095	10.00		27	-2.8	23	-5.0	14	-10.0	58	0	000		28.59			29.73	AA		29.69
17	1852	12	BKN090 OVC100	10.00		26	-3.3	23	-5.2	15	-9.4	63	0	000		28.58			29.73	AA		29.68
17	1952	12	OVC095	10.00		26	-3.3	23	-5.0	16	-8.9	66	0	000		28.56			29.71	AA		29.66
17	2021	12	BKN027 OVC090	10.00		26	-3.3	23	-5.0	16	-8.9	66	0	000		28.55			M	SP		29.65
17	2050	12	SCT027 BKN049 OVC060	10.00		25	-4.0	23	-5.1	18	-8.0	75	0	000		28.54			M	SP		29.64
17	2052	12	SCT027 BKN049 OVC055	10.00		26	-3.3	23	-4.9	17	-8.3	69	0	000		28.54			29.69	AA		29.64
17	2152	12	BKN055 OVC080	4.00	-SN	25	-3.9	22	-5.2	17	-8.3	72	0	000		28.52			29.67	AA	T	29.62

17	2248	12	BKN038 OVC070	2.50	-SN	25	-4.0	23	-4.9	19	-7.0	78	0	000		28.51			M	SP		29.61
17	2250	12	OVC038	3.00	-SN BR	25	-4.0	23	-4.9	19	-7.0	78	0	000		28.51			M	SP		29.61
17	2252	12	OVC036	3.00	-SN BR	24	-4.4	23	-5.1	20	-6.7	85	0	000		28.51			29.66	AA	T	29.61
17	2301	12	OVC028	1.75	-SN BR	24	-4.4	23	-5.1	20	-6.7	85	0	000		28.51			M	SP		29.61
17	2323	12	VV019	1.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.50			M	SP		29.60
17	2334	12	OVC021	1.50	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.50			M	SP		29.60
17	2352	12	OVC025	1.75	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.49			29.64	AA	0.01	29.59
18	0026	12	OVC031	2.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.47			M	SP		29.57
18	0040	12	BKN035 OVC050	3.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.47			M	SP		29.57
18	0052	12	BKN039 OVC050	3.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.46			29.61	AA	0.01	29.56
18	0121	12	FEW007 BKN033 OVC040	2.50	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.46			M	SP		29.56
18	0150	12	FEW007 OVC030	3.00	-SN BR	25	-4.0	24	-4.6	21	-6.0	85	0	000		28.46			M	SP		29.56
18	0152	12	FEW007 OVC030	3.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	3	270		28.46			29.62	AA	0.01	29.56
18	0200	12	OVC030	2.50	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.46			M	SP		29.56
18	0213	12	OVC030	4.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.46			M	SP		29.56
18	0252	12	SCT031 OVC038	3.00	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.44			29.59	AA	T	29.54
18	0255	12	BKN029 OVC038	2.50	-SN BR	24	-4.4	23	-4.9	21	-6.1	88	0	000		28.44			M	SP		29.54
18	0309	12	OVC021	1.50	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.45			M	SP		29.55
18	0316	12	OVC019	1.25	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	190		28.44			M	SP		29.54
18	0327	12	VV014	1.00	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	190		28.44			M	SP		29.54
18	0343	12	OVC017	1.50	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	5	210		28.44			M	SP		29.54
18	0350	12	OVC019	2.00	-SN BR	23	-5.0	22	-5.3	21	-6.0	92	3	190		28.43			M	SP		29.53
18	0352	12	OVC021	2.00	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	200		28.43			29.59	AA	0.02	29.53
18	0401	12	OVC021	1.75	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	190		28.43			M	SP		29.53
18	0418	12	VV015	1.00	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.42			M	SP		29.52
18	0426	12	VV013	1.00	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.42			M	SP		29.52
18	0437	12	VV012	0.75	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.42			M	SP		29.52
18	0452	12	VV013	1.00	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.42			29.57	AA	0.01	29.52
18	0503	12	OVC015	1.25	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	210		28.42			M	SP		29.52
18	0515	12	OVC019	1.75	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	3	200		28.41			M	SP		29.51
18	0538	12	FEW014 OVC021	1.25	-SN BR	23	-5.0	22	-5.3	21	-6.1	92	0	000		28.41			M	SP		29.51
18	0545	12	FEW010 SCT014 OVC023	1.75	-SN BR	23	-5.0	22	-5.5	20	-6.7	88	5	VR		28.41			M	SP		29.51
18	0552	12	SCT013 OVC019	1.50	-SN BR	23	-5.0	22	-5.5	20	-6.7	88	8	240		28.42			29.57	AA	0.01	29.52
18	0604	12	FEW010 SCT016 OVC030	2.00	-SN	23	-5.0	21	-5.8	18	-7.8	81	8	270	20	28.42			M	SP		29.52
18	0614	12	FEW016 OVC025	2.00	-SN	22	-5.6	20	-6.4	17	-8.3	81	11	270	20	28.43			M	SP		29.53
18	0628	12	FEW015 OVC021	1.50	-SN BR	21	-6.1	20	-6.7	17	-8.3	84	8	250	20	28.43			M	SP		29.53
18	0645	12	OVC023	2.00	-SN	20	-6.7	19	-7.4	15	-9.4	81	6	VR		28.44			M	SP		29.54
18	0652	12	OVC021	2.00	-SN	20	-6.7	19	-7.4	15	-9.4	81	6	270	16	28.44			29.59	AA	T	29.54
18	0705	12	OVC036	3.00	-SN	20	-6.7	19	-7.4	15	-9.4	81	7	VR		28.44			M	SP		29.54
18	0725	12	BKN046 OVC060	1.75	-SN	20	-6.7	18	-7.6	14	-10.0	77	8	250	16	28.44			M	SP		29.54
18	0752	12	SCT033 SCT060 OVC100	2.00	-SN	19	-7.2	17	-8.1	13	-10.6	77	9	250	16	28.45			29.61	AA	T	29.55
18	0800	12	BKN024 BKN060 OVC100	3.00	-SN	19	-7.2	17	-8.1	13	-10.6	77	8	270		28.45			M	SP		29.55
18	0852	12	OVC023	2.50	-SN	19	-7.2	17	-8.3	12	-11.1	74	13	280	20	28.47			29.62	AA	T	29.57
18	0907	12	OVC023	1.50	-SN	18	-7.8	16	-8.7	12	-11.1	77	8	260	22	28.48			M	SP		29.58
18	0944	12	OVC019	2.50	-SN	18	-7.8	16	-8.9	10	-12.2	71	9	290	18	28.48			M	SP		29.58
18	0950	12	BKN022 BKN027 OVC070	3.00	-SN	18	-8.0	16	-9.1	9	-13.0	68	7	280	22	28.48			M	SP		29.58
18	0952	12	BKN022 OVC070	4.00	-SN	18	-7.8	16	-9.1	9	-12.8	68	8	300	22	28.48			29.64	AA	T	29.58
18	1019	12	BKN030 OVC037	8.00	-SN	18	-7.8	15	-9.2	8	-13.3	65	8	260		28.47			M	SP		29.57
18	1039	12	BKN029 OVC090	9.00		18	-7.8	15	-9.2	8	-13.3	65	10	250	17	28.47			M	SP		29.57
18	1052	12	BKN029 OVC100	9.00	UP	19	-7.2	16	-8.9	7	-13.9	59	10	290	18	28.46			29.62	AA	T	29.56
18	1101	12	FEW022 SCT029 BKN100	3.00	UP	19	-7.2	16	-8.9	7	-13.9	59	13	280	30	28.46			M	SP		29.56
18	1152	12	SCT039	7.00	UP	19	-7.2	15	-9.1	5	-15.0	54	11	280	26	28.45			29.61	AA	T	29.55
18	1252	12	OVC045	8.00		20	-6.7	16	-8.9	4	-15.6	50	11	300	31	28.45			29.61	AA	T	29.55
18	1352	12	OVC047	8.00		20	-6.7	16	-9.0	3	-16.1	47	15	270	29	28.45			29.61	AA	T	29.55
18	1452	12	OVC055	5.00	UP	21	-6.1	16	-9.1	-3	-19.4	34	17	290	30	28.47			29.62	AA	T	29.57
18	1552	12	CLR	10.00		20	-6.7	15	-9.6	-4	-20.0	34	13	300	30	28.49			29.65	AA	T	29.59
18	1652	12	CLR	10.00		18	-7.8	13	-10.4	-5	-20.6	35	11	280	23	28.50			29.66	AA		29.60
18	1752	12	CLR	10.00		17	-8.3	12	-10.8	-5	-20.6	37	10	270	20	28.52			29.68	AA		29.62
18	1852	12	CLR	10.00		16	-8.9	12	-11.2	-5	-20.6	39	13	280	24	28.53			29.70	AA		29.63
18	1952	12	CLR	10.00		15	-9.4	11	-11.6	-5	-20.6	40	11	270	20	28.54			29.71	AA		29.64
18	2052	12	CLR	10.00		14	-10.0	10	-12.0	-4	-20.0	44	7	VR		28.55			29.72	AA		29.65
18	2152	12	CLR	10.00		13	-10.6	10	-12.3	-3	-19.4	48	10	260	21	28.56			29.72	AA		29.66
18	2252	12	CLR	10.00		12	-11.1	9	-12.7	-2	-18.9	53	10	260		28.56			29.73	AA		29.66
18	2352	12	CLR	10.00		11	-11.7	8	-13.2	-3	-19.4	53	5	VR	18	28.56			29.73	AA		29.66
19	0052	12	CLR	10.00		10	-12.2	8	-13.5	-2	-18.9	58	7	VR		28.56			29.73	AA		29.66
19	0152	12	FEW120	10.00		11	-11.7	8	-13.2	-3	-19.4	53	6	VR	21	28.55			29.72	AA		29.65
19	0252	12	CLR	10.00		11	-11.7	8	-13.2	-3	-19.4	53	18	270	30	28.56			29.73	AA		29.66
19	0352	12	CLR	10.00		11	-11.7	8	-13.2	-3	-19.4	53	7	250	17	28.56			29.73	AA		29.66
19	0452	12	CLR	10.00		10	-12.2	7	-13.6	-3	-19.4	55	8	240		28.57			29.74	AA		29.67
19	0552	12	CLR	10.00		10	-12.2	7	-13.6	-3	-19.4	55	9	180	18	28.56			29.73	AA		29.66
19	0652	12	CLR	10.00		10	-12.2	7	-13.6	-3	-19.4	55	10	270	22	28.57			29.75	AA		29.67
19	0752	12	CLR	10.00		11	-11.7	8	-13.1	-2	-18.9	55	13	270	21	28.57			29.75	AA		29.67
19	0852	12	CLR	10.00		12	-11.1	9	-12.7	-3	-19.4	51	8	240		28.57			29.74	AA		29.67
19	0952	12	CLR	9.00		14	-10.0	10	-11.9	-3	-19.4	46	10	270	33	28.57			29.74	AA		29.67
19	1052	12	CLR	10.00		15	-9.4	11	-11.5	-3	-19.4	44	16	260	30	28.57			29.74	AA		29.67
19	1152	12	CLR	7.00		16	-8.9	12	-11.0	-2	-18.9	45	20	270	34	28.59			29.76	AA		29.69
19	1252	12	CLR	9.00		16	-8.9	12	-10.9	-1	-18.3	47	21	290	34	28.56			29.74	AA	T	29.66
19	1352	12	CLR	10.00		19	-7.2	15	-9.6	-0	-17.8	43	10	310	20	28.57			29.74	AA	T	29.67
19	1452	12	CLR	10.00		19	-7.2	15	-9.5	1	-17.2	45	18	290	33	28.58			29.75	AA		29.68
19	1552	12	FEW060	10.00		19	-7.2	15	-9.4	2	-16.7	47	10	290	23	28.59			29.77	AA		29.69
19	1652	12	BKN050	10.00		18	-7.8	14	-9.8	2	-16.7	49	13	290	23	28.62			29.79	AA		29.72
19	1752	12	BKN044	10.00		17	-8.3	13	-10.2	2	-16.7	51	9	290	22	28.66			29.83	AA		29.76
19	1852	12	FEW040	10.00		16	-8.9	13	-10.6	2	-16.7	54	11	290		28.69			29.88	AA		29.80
19	1952	12	CLR	10.00		14	-10.0	11	-11.5	1	-17.2	56	7	280	17	28.72			29.91	AA		29.83
19	2052	12	CLR	10.00		13	-10.6	10	-12.0	1	-17.2	58	8	290	20	28.74			29.92	AA		29.84
19	2152	12	CLR	10.00		12	-11.1	10	-12.4	1	-17.2	61	11	270	24	28.74			29.91	AA		29.84
19	2252	12	CLR	10.00		13	-10.6	11	-11.9	2	-16.7	61	8	260		28.75			29.93	AA		29.86
19	2352	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	8	270		28.76			29.94	AA		29.87
20	0052	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	8	270		28.78			29.96	AA		29.89
20	0152	12	FEW030	10.00		14	-10.0	12	-11.2	4	-15.6	64	9	260		28.82			30.00	AA		29.93
20	0252	12	CLR	10.00		15	-9.4	12	-10.8	4	-15.6	61	10	270		28.84			30.02	AA		29.95
20	0352	12	CLR	10.00		14	-10.0	12	-11.2	4	-15.6	64	10	270	23	28.84			30.03	AA		29.95
20	0452	12	CLR	10.00		14	-10.0	12	-11.2	4	-15.6	64	11	290	20	28.85			30.03	AA		29.96
20	0552	12	CLR	10.00		14	-10.0	11	-11.3	3	-16.1	61	11	290	23	28.89			30.08	AA		30.00
20	0652	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	10	280		28.92			30.11	AA		30.03
20	0752	12	CLR	10.00		14	-10.0	11	-11.3	3	-16.1	61	15	280	23	28.92			30.11	AA		30.03
20	0852	12	CLR	10.00		15	-9.4	12	-10.9	3	-16.1	59	11	290	24	28.92			30.11	AA		30.03
20	0952	12	CLR	10.00		17	-8.3	14	-10.0	4	-15.6	56	13	300	20	28.92			30.11	AA		30.03
20	1052	12	CLR	10.00		20	-6.7	16	-8.7	5	-15.0	52	10	300	22	28.92			30.10	AA		30.03
20	1152	12	CLR	10.00		22	-5.6	18	-7.9	5	-15.0	48	14	290	22	28.90			30.08	AA		30.01
20	1252	12	CLR	10.00		25	-3.9	20	-6.8	5	-15.0	42	15	290	22	28.87			30.05	AA		29.98
20	1352	12	CLR	10.00		26	-3.3	20	-6.4	5	-15.0	40	8	310	20	28.86			30.04	AA		29.97
20	1452	12	CLR	10.00		27	-2.8	21	-6.1	5	-15.0	39	7	VR	21	28.86			30.03	AA		29.97
20	1552	12	CLR	10.00		25	-3.9	20	-6.7	6	-14.4	44	11	310	20	28.86			30.03	AA		29.97
20	1652	12	CLR	10.00		24	-4.4	19	-7.1	6	-14.4	46	8	300	17	28.85			30.03	AA		29.96
20	1752	12	CLR	10.00		23	-5.0	18	-7.5	6	-14.4	48	8	310	16	28.85			30.03	AA		29.96
20	1852	12	CLR	10.00		23	-5.0	18	-7.5	6	-14.4	48	9	310	18	28.86			30.03	AA		29.97

20	1952	12	CLR	10.00		23	-5.0	19	-7.3	7	-13.9	50	3	VR		28.87			30.04	AA	29.98
20	2052	12	FEW120	10.00		21	-6.1	17	-8.1	7	-13.9	55	6	160		28.87			30.04	AA	29.98
20	2152	12	BKN120	10.00		21	-6.1	17	-8.1	7	-13.9	55	0	000		28.87			30.04	AA	29.98
20	2252	12	SCT120	10.00		21	-6.1	17	-8.1	7	-13.9	55	8	320		28.86			30.03	AA	29.97
20	2352	12	BKN110	10.00		21	-6.1	17	-8.1	7	-13.9	55	6	VR		28.86			30.03	AA	29.97
21	0052	12	CLR	10.00		20	-6.7	17	-8.5	7	-13.9	57	0	000		28.86			30.03	AA	29.97
21	0152	12	CLR	10.00		19	-7.2	16	-8.9	7	-13.9	59	5	350		28.86			30.03	AA	29.97
21	0252	12	CLR	10.00		18	-7.8	15	-9.3	7	-13.9	62	0	000		28.85			30.02	AA	29.96
21	0352	12	CLR	10.00		18	-7.8	15	-9.4	6	-14.4	59	5	VR		28.83			30.01	AA	29.94
21	0452	12	CLR	10.00		17	-8.3	14	-9.8	6	-14.4	62	6	010		28.84			30.01	AA	29.95
21	0552	12	BKN120	10.00		18	-7.8	15	-9.4	6	-14.4	59	6	360		28.85			30.02	AA	29.96
21	0652	12	CLR	10.00		18	-7.8	15	-9.4	6	-14.4	59	6	350		28.86			30.03	AA	29.97
21	0752	12	CLR	10.00		17	-8.3	14	-9.8	6	-14.4	62	6	VR		28.87			30.05	AA	29.98
21	0852	12	CLR	10.00		20	-6.7	17	-8.5	7	-13.9	57	7	VR	18	28.87			30.04	AA	29.98
21	0952	12	CLR	10.00		22	-5.6	18	-7.8	6	-14.4	50	9	330	20	28.88			30.06	AA	29.99
21	1052	12	CLR	10.00		23	-5.0	18	-7.5	6	-14.4	48	8	340	16	28.88			30.06	AA	29.99
21	1152	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	11	330	23	28.89			30.06	AA	30.00
21	1252	12	CLR	10.00		25	-3.9	19	-6.9	4	-15.6	40	15	350	22	28.88			30.05	AA	29.99
21	1352	12	CLR	10.00		25	-3.9	19	-7.0	3	-16.1	38	14	320	26	28.87			30.04	AA	29.98
21	1452	12	CLR	10.00		26	-3.3	20	-6.5	4	-15.6	39	11	340	22	28.87			30.04	AA	29.98
21	1552	12	CLR	10.00		25	-3.9	19	-6.9	4	-15.6	40	8	340	17	28.89			30.06	AA	30.00
21	1652	12	CLR	10.00		23	-5.0	18	-7.7	4	-15.6	44	0	000		28.91			30.08	AA	30.02
21	1752	12	CLR	10.00		22	-5.6	17	-8.1	4	-15.6	46	5	VR		28.92			30.10	AA	30.03
21	1852	12	CLR	10.00		21	-6.1	17	-8.3	5	-15.0	50	6	340		28.95			30.13	AA	30.06
21	1952	12	CLR	10.00		20	-6.7	16	-9.0	2	-16.7	45	5	VR		28.96			30.14	AA	30.07
21	2052	12	CLR	10.00		18	-7.8	14	-9.8	2	-16.7	49	3	VR		28.97			30.15	AA	30.08
21	2152	12	CLR	10.00		17	-8.3	14	-10.2	2	-16.7	51	5	VR		28.98			30.15	AA	30.09
21	2252	12	CLR	10.00		15	-9.4	12	-10.9	3	-16.1	59	3	320		28.98			30.16	AA	30.09
21	2352	12	CLR	10.00		15	-9.4	12	-10.9	3	-16.1	59	6	340		28.98			30.16	AA	30.09
22	0052	12	FEW031	10.00		14	-10.0	11	-11.3	3	-16.1	61	8	330		28.99			30.17	AA	30.10
22	0152	12	CLR	10.00		14	-10.0	11	-11.3	3	-16.1	61	5	VR		28.99			30.17	AA	30.10
22	0252	12	CLR	10.00		14	-10.0	11	-11.3	3	-16.1	61	7	330		29.00			30.18	AA	30.12
22	0352	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	6	VR		29.00			30.19	AA	30.12
22	0452	12	CLR	10.00		14	-10.0	11	-11.3	3	-16.1	61	5	VR		29.00			30.19	AA	30.12
22	0552	12	CLR	10.00		13	-10.6	11	-11.8	3	-16.1	64	3	030		28.99			30.17	AA	30.10
22	0652	12	CLR	10.00		15	-9.4	12	-11.0	2	-16.7	56	7	VR		29.00			30.19	AA	30.12
22	0752	12	CLR	10.00		16	-8.9	13	-10.6	2	-16.7	54	8	340		29.03			30.22	AA	30.15
22	0852	12	CLR	10.00		18	-7.8	14	-9.7	3	-16.1	52	8	330	18	29.05			30.24	AA	30.17
22	0952	12	CLR	10.00		21	-6.1	17	-8.5	3	-16.1	45	10	330	20	29.05			30.24	AA	30.17
22	1052	12	CLR	10.00		22	-5.6	17	-8.1	3	-16.1	44	11	330	21	29.05			30.24	AA	30.17
22	1152	12	CLR	10.00		24	-4.4	19	-7.4	3	-16.1	40	11	330	18	29.03			30.21	AA	30.14
22	1252	12	CLR	10.00		25	-3.9	19	-7.0	3	-16.1	38	9	360	21	29.02			30.19	AA	30.13
22	1352	12	CLR	10.00		26	-3.3	20	-6.5	4	-15.6	39	6	VR		29.02			30.20	AA	30.13
22	1452	12	CLR	10.00		25	-3.9	20	-6.8	5	-15.0	42	0	000		29.00			30.17	AA	30.11
22	1552	12	CLR	10.00		25	-3.9	20	-6.8	5	-15.0	42	6	350		29.00			30.17	AA	30.11
22	1652	12	CLR	10.00		24	-4.4	19	-7.2	5	-15.0	44	5	VR		29.02			30.20	AA	30.13
22	1752	12	CLR	10.00		20	-6.7	17	-8.5	7	-13.9	57	0	000		29.02			30.20	AA	30.13
22	1852	12	CLR	10.00		17	-8.3	14	-9.7	7	-13.9	65	0	000		29.03			30.21	AA	30.14
22	1952	12	CLR	10.00		13	-10.6	11	-11.4	6	-14.4	73	0	000		29.03			30.23	AA	30.15
22	2052	12	CLR	10.00		11	-11.7	10	-12.3	6	-14.4	80	0	000		29.02			30.20	AA	30.13
22	2152	12	CLR	10.00		11	-11.7	10	-12.3	6	-14.4	80	0	000		29.00			30.19	AA	30.12
22	2252	12	CLR	10.00		9	-12.8	8	-13.2	5	-15.0	84	0	000		29.00			30.19	AA	30.12
22	2352	12	CLR	10.00		9	-12.8	8	-13.2	5	-15.0	84	0	000		29.00			30.19	AA	30.12
23	0052	12	CLR	10.00		10	-12.2	9	-12.6	7	-13.9	88	0	000		29.00			30.18	AA	30.11
23	0152	12	CLR	10.00		13	-10.6	11	-11.4	6	-14.4	73	3	010		28.99			30.17	AA	30.10
23	0252	12	CLR	10.00		15	-9.4	13	-10.6	6	-14.4	67	0	000		28.98			30.16	AA	30.09
23	0352	12	CLR	10.00		15	-9.4	13	-10.6	6	-14.4	67	3	VR		28.95			30.13	AA	30.06
23	0452	12	CLR	10.00		15	-9.4	13	-10.6	6	-14.4	67	3	VR		28.94			30.11	AA	30.05
23	0552	12	CLR	10.00		16	-8.9	14	-10.2	6	-14.4	64	3	VR		28.93			30.11	AA	30.04
23	0652	12	CLR	10.00		17	-8.3	14	-9.9	5	-15.0	59	3	VR		28.90			30.08	AA	30.01
23	0752	12	SCT016	10.00		17	-8.3	14	-9.8	6	-14.4	62	5	VR		28.87			30.06	AA	29.98
23	0852	12	SCT120	10.00		17	-8.3	14	-9.8	6	-14.4	62	0	000		28.90			30.08	AA	30.01
23	0938	12	BKN016 OVC110	10.00		18	-7.8	15	-9.3	7	-13.9	62	0	000		28.92			M	SP	30.03
23	0952	12	OVC016	10.00		18	-7.8	15	-9.3	7	-13.9	62	3	VR		28.90			30.08	AA	30.01
23	1033	12	SCT016 OVC120	10.00		19	-7.2	15	-9.1	5	-15.0	54	6	VR		28.87			M	SP	29.98
23	1052	12	SCT017 OVC110	10.00		19	-7.2	15	-9.1	5	-15.0	54	7	VR		28.80			29.98	AA	29.91
23	1101	12	BKN017 OVC110	10.00		19	-7.2	15	-9.1	5	-15.0	54	8	010		28.80			M	SP	29.91
23	1137	12	FEW016	10.00		19	-7.2	16	-9.0	6	-14.4	57	7	VR	20	28.76			M	SP	29.87
23	1152	12	CLR	10.00		19	-7.2	16	-9.0	6	-14.4	57	8	020	22	28.74			29.93	AA	29.85
23	1252	12	OVC100	10.00		19	-7.2	15	-9.3	3	-16.1	49	8	020	17	28.74			29.93	AA	29.85
23	1352	12	OVC100	10.00		20	-6.7	16	-8.9	3	-16.1	47	8	010		28.69			29.87	AA	29.80
23	1452	12	OVC100	10.00		20	-6.7	16	-9.0	2	-16.7	45	5	VR		28.68			29.85	AA	29.78
23	1552	12	OVC100	10.00		20	-6.7	15	-9.1	1	-17.2	43	7	VR	18	28.67			29.83	AA	29.77
23	1652	12	OVC110	10.00		20	-6.7	15	-9.1	1	-17.2	43	10	020	18	28.69			29.85	AA	29.79
23	1730	12	BKN023 OVC100	10.00		20	-6.7	15	-9.1	1	-17.2	43	9	010		28.69			M	SP	29.80
23	1752	12	OVC023	10.00		20	-6.7	16	-9.0	2	-16.7	45	6	010		28.71			29.88	AA	29.81
23	1852	12	OVC022	10.00		20	-6.7	16	-9.0	2	-16.7	45	10	010	16	28.69			29.86	AA	29.80
23	1952	12	OVC022	10.00		20	-6.7	16	-8.9	3	-16.1	47	6	VR		28.68			29.85	AA	29.78
23	2052	12	BKN023	10.00		20	-6.7	16	-9.0	2	-16.7	45	9	360		28.67			29.83	AA	29.77
23	2152	12	OVC020	10.00		20	-6.7	16	-9.0	2	-16.7	45	7	VR		28.65			29.81	AA	29.75
23	2250	12	SCT020	10.00		21	-6.0	16	-8.8	1	-17.0	41	9	010		28.64			M	SP	29.74
23	2252	12	SCT020	10.00		21	-6.1	16	-8.7	2	-16.7	43	9	360		28.64			29.80	AA	29.74
23	2332	12	BKN019	10.00		21	-6.1	16	-8.7	2	-16.7	43	7	VR		28.65			M	SP	29.75
23	2352	12	OVC020	10.00		21	-6.1	16	-8.7	2	-16.7	43		M		28.64			29.81	AA	29.74
24	0050	12	SCT019	10.00		19	-7.0	15	-9.5	1	-17.0	45	8	360	17	28.64			M	SP	29.74
24	0052	12	FEW019	10.00		20	-6.7	15	-9.1	1	-17.2	43	9	360	17	28.64			29.80	AA	29.74
24	0152	12	CLR	10.00		19	-7.2	15	-9.6	-0	-17.8	43	7	350		28.64			29.80	AA	29.74
24	0252	12	CLR	10.00		18	-7.8	14	-10.0	-0	-17.8	45	5	VR		28.65			29.82	AA	29.75
24	0352	12	CLR	10.00		17	-8.3	13	-10.3	1	-17.2	49	0	000		28.67			29.83	AA	29.77
24	0452	12	CLR	10.00		11	-11.7	9	-12.7	2	-16.7	67	0	000		28.68			29.85	AA	29.78
24	0552	12	CLR	10.00		8	-13.3	7	-14.1	1	-17.2	73	0	000		28.69			29.87	AA	29.80
24	0652	12	CLR	10.00		6	-14.4	5	-14.9	1	-17.2	80	0	000		28.71			29.89	AA	29.81
24	0752	12	CLR	10.00		5	-15.0	4	-15.4	1	-17.2	83	0	000		28.74			29.91	AA	29.84
24	0852	12	CLR	10.00		13	-10.6	11	-11.7	4	-15.6	67	0	000		28.74			29.92	AA	29.85
24	0952	12	CLR	10.00		22	-5.6	17	-8.1	4	-15.6	46	0	000		28.74			29.92	AA	29.85
24	1052	12	CLR	10.00		27	-2.8	21	-6.2	4	-15.6	37	3	VR		28.74			29.91	AA	29.85
24	1152	12	CLR	10.00		31	-0.6	23	-4.9	2	-16.7	29	3	VR		28.72			29.88	AA	29.83
24	1252	12	CLR	10.00		33	0.6	24	-4.2	2	-16.7	27	3	VR		28.72			29.88	AA	29.83
24	1352	12	CLR	10.00		33	0.6	25	-3.9	5	-15.0	30	7	300		28.71			29.88	AA	29.82
24	1452	12	CLR	10.00		34	1.1	25	-3.8	2	-16.7	25	6	VR		28.74			29.89	AA	29.84
24	1552	12	CLR	10.00		32	0.0	24	-4.4	3	-16.1	29	7	310		28.76			29.92	AA	29.87
24	1652	12	SCT110	10.00		30	-1.1	23	-5.1	4	-15.6	33	3	340		28.78			29.95	AA	29.89
24	1752	12	BKN120	10.00		27	-2.8	22	-5.5	10	-12.2	49	0	000		28.80			29.98	AA	29.91
24	1852	12	CLR	10.00		28	-2.2	22	-5.6	6	-14.4	39	7	VR		28.82			30.00	AA	29.93
24	1952	12	SCT100	10.00		27	-2.8	21	-6.0	6	-14.4	41	5	340		28.84			30.02	AA	29.95
24	2052	12	FEW065 SCT075 OVC095	10.00		27	-2.8	21	-5.8	7	-13.9	43	3	VR		28.84			30.01	AA	29.95
24	2152	12	OVC070	10.00		27	-2.8	21	-5.8	7	-13.9	43	5	VR		28.86			30.03	AA	29.97

24	2252	12	OVC065	10.00		26	-3.3	21	-6.2	7	-13.9	44	3	340		28.88			30.05	AA		29.99
24	2352	12	OVC060	10.00		25	-3.9	20	-6.6	7	-13.9	46	6	VR		28.90			30.06	AA		30.01
25	0052	12	SCT085	10.00		24	-4.4	20	-6.8	8	-13.3	50	3	VR		28.91			30.07	AA		30.02
25	0152	12	CLR	10.00		23	-5.0	19	-7.2	8	-13.3	52	6	VR		28.93			30.10	AA		30.04
25	0252	12	CLR	10.00		21	-6.1	18	-7.9	9	-12.8	60	0	000		28.95			30.11	AA		30.06
25	0352	12	CLR	10.00		19	-7.2	17	-8.5	10	-12.2	68	0	000		28.96			30.13	AA		30.07
25	0452	12	CLR	10.00		21	-6.1	18	-7.7	10	-12.2	62	5	VR		28.98			30.15	AA		30.09
25	0552	12	CLR	10.00		16	-8.9	14	-9.8	9	-12.8	74	0	000		29.00			30.18	AA		30.11
25	0652	12	CLR	10.00		16	-8.9	15	-9.6	11	-11.7	81	0	000		29.03			30.20	AA		30.14
25	0752	12	CLR	10.00		17	-8.3	15	-9.3	10	-12.2	74	5	160		29.05			30.22	AA		30.16
25	0852	12	CLR	10.00		21	-6.1	18	-7.5	12	-11.1	68	5	180		29.07			30.25	AA		30.19
25	0952	12	CLR	10.00		26	-3.3	22	-5.5	13	-10.6	58	3	170		29.09			30.27	AA		30.21
25	1052	12	CLR	10.00		30	-1.1	25	-3.7	15	-9.4	54	0	000		29.10			30.28	AA		30.22
25	1152	12	CLR	10.00		31	-0.6	26	-3.4	15	-9.4	51	0	000		29.09			30.27	AA		30.21
25	1252	12	CLR	10.00		34	1.1	28	-2.3	15	-9.4	46	0	000		29.07			30.24	AA		30.19
25	1352	12	CLR	10.00		34	1.1	28	-2.2	16	-8.9	48	5	170		29.07			30.24	AA		30.19
25	1452	12	CLR	10.00		35	1.7	29	-1.8	16	-8.9	46	5	200		29.08			30.25	AA		30.20
25	1552	12	CLR	10.00		35	1.7	29	-1.8	16	-8.9	46	5	200		29.08			30.25	AA		30.20
25	1652	12	CLR	10.00		30	-1.1	26	-3.3	18	-7.8	61	0	000		29.09			30.27	AA		30.21
25	1752	12	CLR	10.00		28	-2.2	25	-4.0	18	-7.8	66	0	000		29.09			30.27	AA		30.21
25	1852	12	CLR	10.00		26	-3.3	23	-4.7	18	-7.8	72	0	000		29.09			30.28	AA		30.21
25	1952	12	CLR	10.00		25	-3.9	23	-4.9	19	-7.2	78	0	000		29.09			30.27	AA		30.21
25	2052	12	CLR	10.00		26	-3.3	23	-4.7	18	-7.8	72	3	180		29.09			30.28	AA		30.21
25	2152	12	CLR	10.00		26	-3.3	23	-4.9	17	-8.3	69	3	200		29.08			30.25	AA		30.20
25	2252	12	CLR	10.00		26	-3.3	23	-4.9	17	-8.3	69	5	200		29.07			30.24	AA		30.19
25	2352	12	CLR	10.00		26	-3.3	23	-4.9	17	-8.3	69	3	200		29.05			30.22	AA		30.17
26	0052	12	CLR	10.00		27	-2.8	24	-4.3	18	-7.8	69	9	200		29.03			30.20	AA		30.15
26	0152	12	CLR	10.00		27	-2.8	24	-4.2	19	-7.2	72	3	200		29.02			30.18	AA		30.13
26	0252	12	CLR	10.00		27	-2.8	25	-4.0	20	-6.7	75	3	210		29.00			30.16	AA		30.11
26	0352	12	CLR	10.00		27	-2.8	25	-3.8	21	-6.1	78	5	190		28.97			30.13	AA		30.08
26	0452	12	CLR	10.00		25	-3.9	23	-4.7	20	-6.7	81	5	190		28.95			30.11	AA		30.06
26	0552	12	CLR	10.00		22	-5.6	21	-6.0	19	-7.2	88	6	190		28.93			30.10	AA		30.04
26	0652	12	CLR	10.00		26	-3.3	25	-3.9	23	-5.0	88	6	190		28.93			30.09	AA		30.04
26	0752	12	CLR	10.00		27	-2.8	26	-3.3	24	-4.4	88	5	190		28.88			30.05	AA		29.99
26	0852	12	CLR	10.00		34	1.1	31	-0.5	26	-3.3	73	8	220		28.87			30.03	AA		29.98
26	0952	12	CLR	10.00		38	3.3	33	0.7	26	-3.3	62	10	220	21	28.83			29.98	AA		29.94
26	1052	12	FEW041 BKN090	10.00		40	4.4	35	1.7	28	-2.2	62	9	230	22	28.80			29.96	AA		29.91
26	1152	12	FEW033 BKN065 OVC095	10.00		38	3.3	35	1.5	30	-1.1	73	10	210	23	28.77			29.93	AA	T	29.88
26	1252	12	CLR	10.00		40	4.4	36	1.9	29	-1.7	65	9	230	20	28.75			29.90	AA		29.86
26	1352	12	BKN120	10.00		41	5.0	36	2.4	30	-1.1	65	8	210	18	28.72			29.87	AA		29.83
26	1452	12	FEW090	10.00		41	5.0	37	2.6	31	-0.6	68	6	210		28.71			29.86	AA		29.81
26	1552	12	FEW048	10.00		41	5.0	36	2.4	30	-1.1	65	8	220		28.69			29.85	AA		29.80
26	1652	12	CLR	10.00		40	4.4	36	2.3	31	-0.6	70	5	220		28.69			29.84	AA		29.79
26	1952	12	CLR	10.00		40	4.4	36	2.3	31	-0.6	70	7	210		28.71			29.85	AA		29.81
26	2052	12	CLR	10.00		40	4.4	36	2.3	31	-0.6	70	9	200		28.69			29.84	AA		29.80
26	2152	12	CLR	10.00		39	3.9	36	2.0	31	-0.6	73	8	210		28.71			29.86	AA		29.82
26	2252	12	CLR	10.00		39	3.9	36	2.0	31	-0.6	73	6	220		28.71			29.86	AA		29.82
26	2352	12	SCT120	10.00		39	3.9	35	1.8	30	-1.1	70	9	250	18	28.72			29.86	AA		29.83
27	0052	12	FEW120	10.00		38	3.3	34	1.3	29	-1.7	70	7	250		28.72			29.87	AA		29.83
27	0152	12	SCT050	10.00		38	3.3	33	0.7	26	-3.3	62	10	230	17	28.74			29.87	AA		29.84

Dynamically generated Thu Jan 28 09:39:03 EST 2016 via http://www.ncdc.noaa.gov/qclcd/QCLCD

Appendix B
Continuous Sound Level Measurements

Figure B-1
A-Weighted Sound Pressure Levels & Wind Speeds - Location L1
Thursday, January 7, 2016 through Friday, January 22, 2016

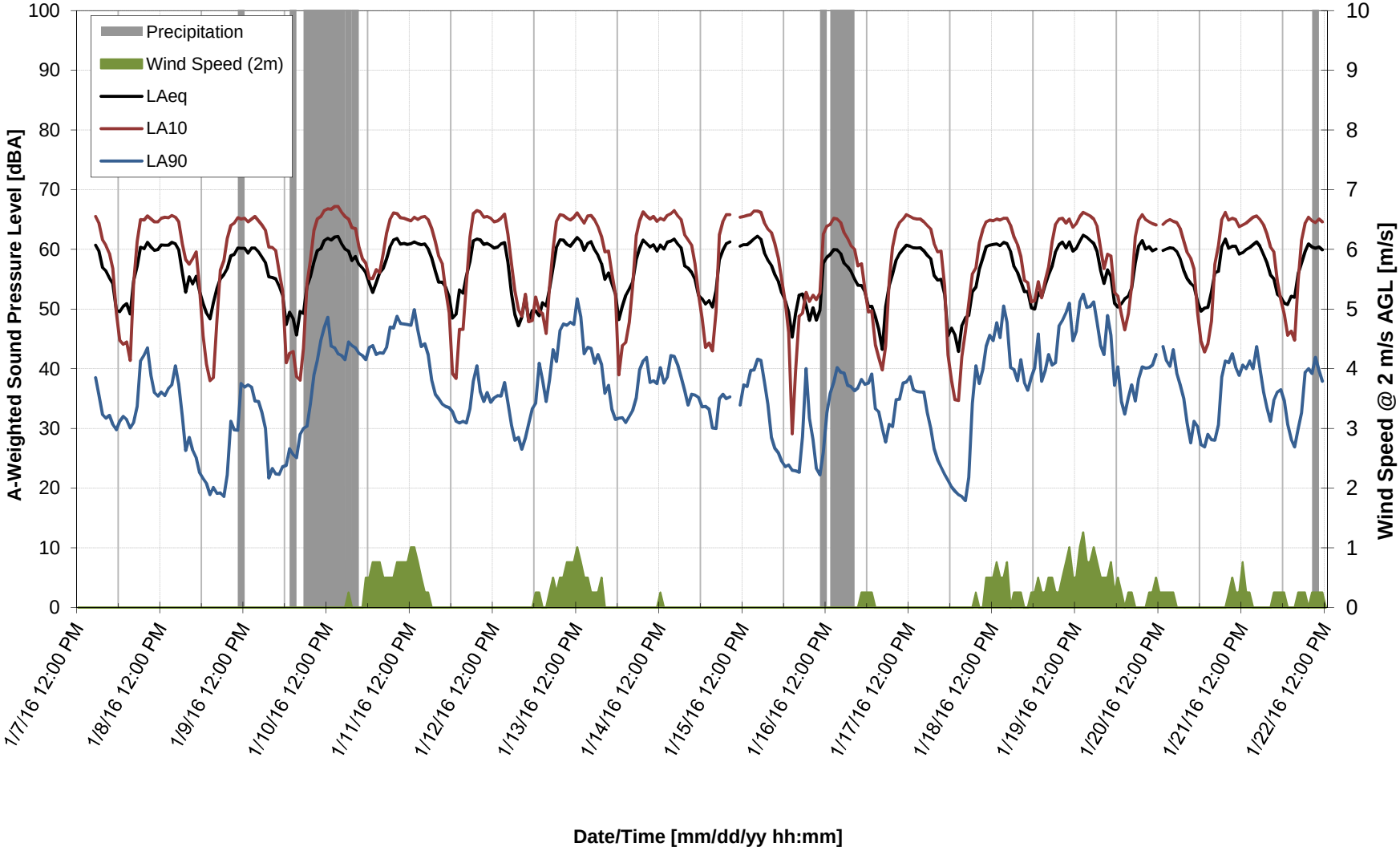


Figure B-2
C-Weighted Sound Pressure Levels & Wind Speeds - Location L1
Thursday, January 7, 2016 through Friday, January 22, 2016

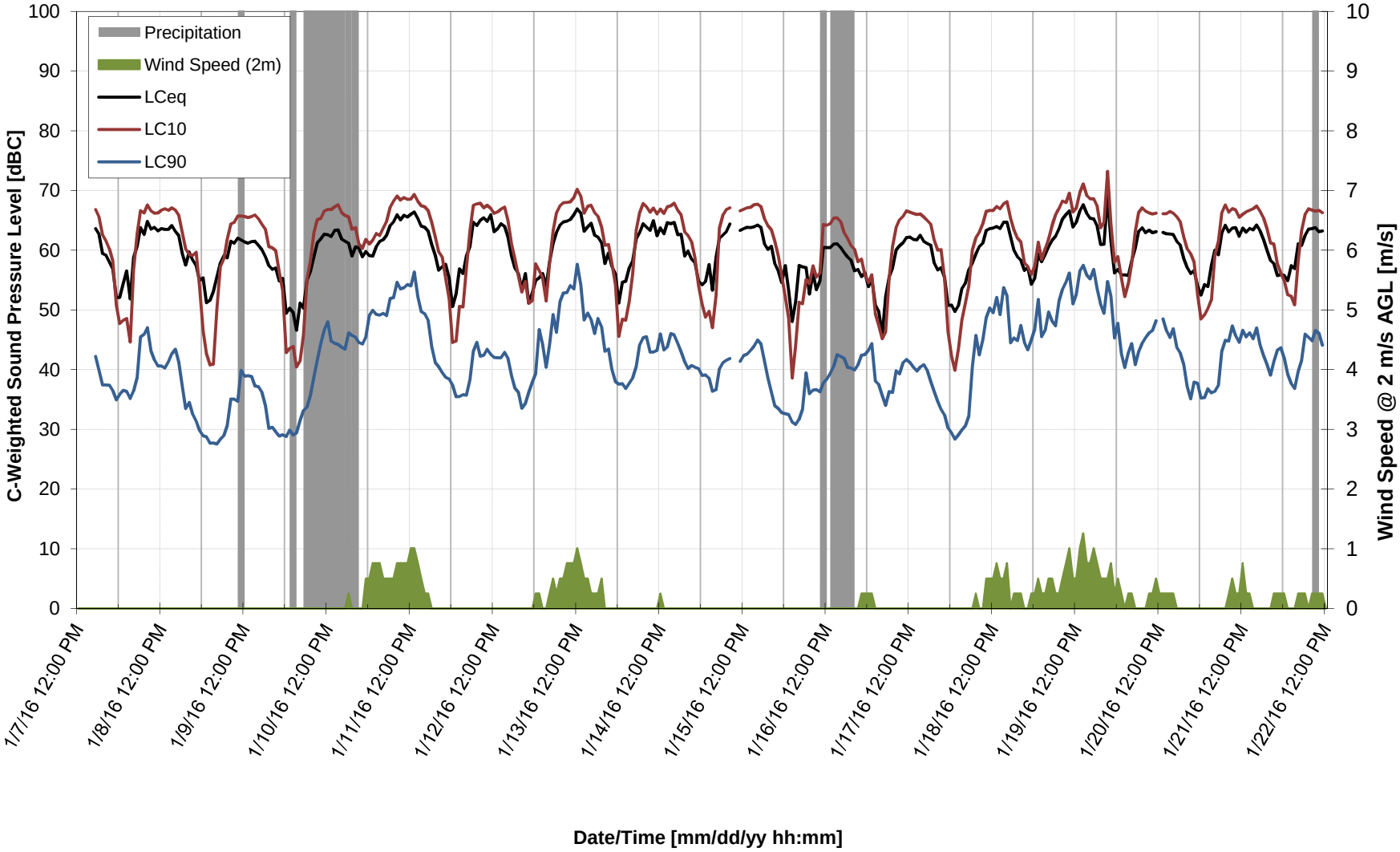


Figure B-3
A-Weighted Sound Pressure Levels & Wind Speeds - Location L2
Thursday, January 7, 2016 through Friday, January 22, 2016

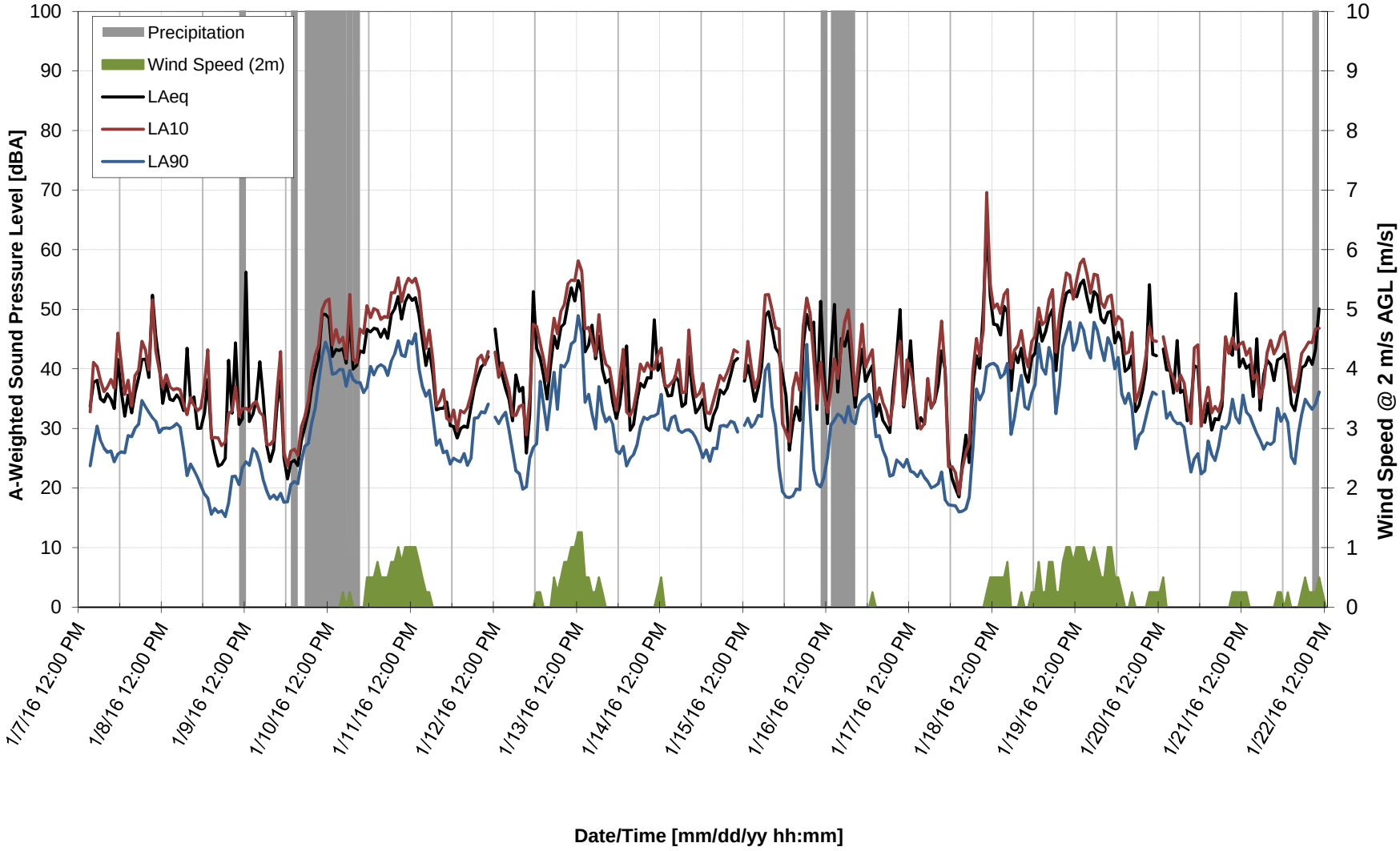


Figure B-4
C-Weighted Sound Pressure Levels & Wind Speeds - Location L2
Thursday, January 7, 2016 through Friday, January 22, 2016

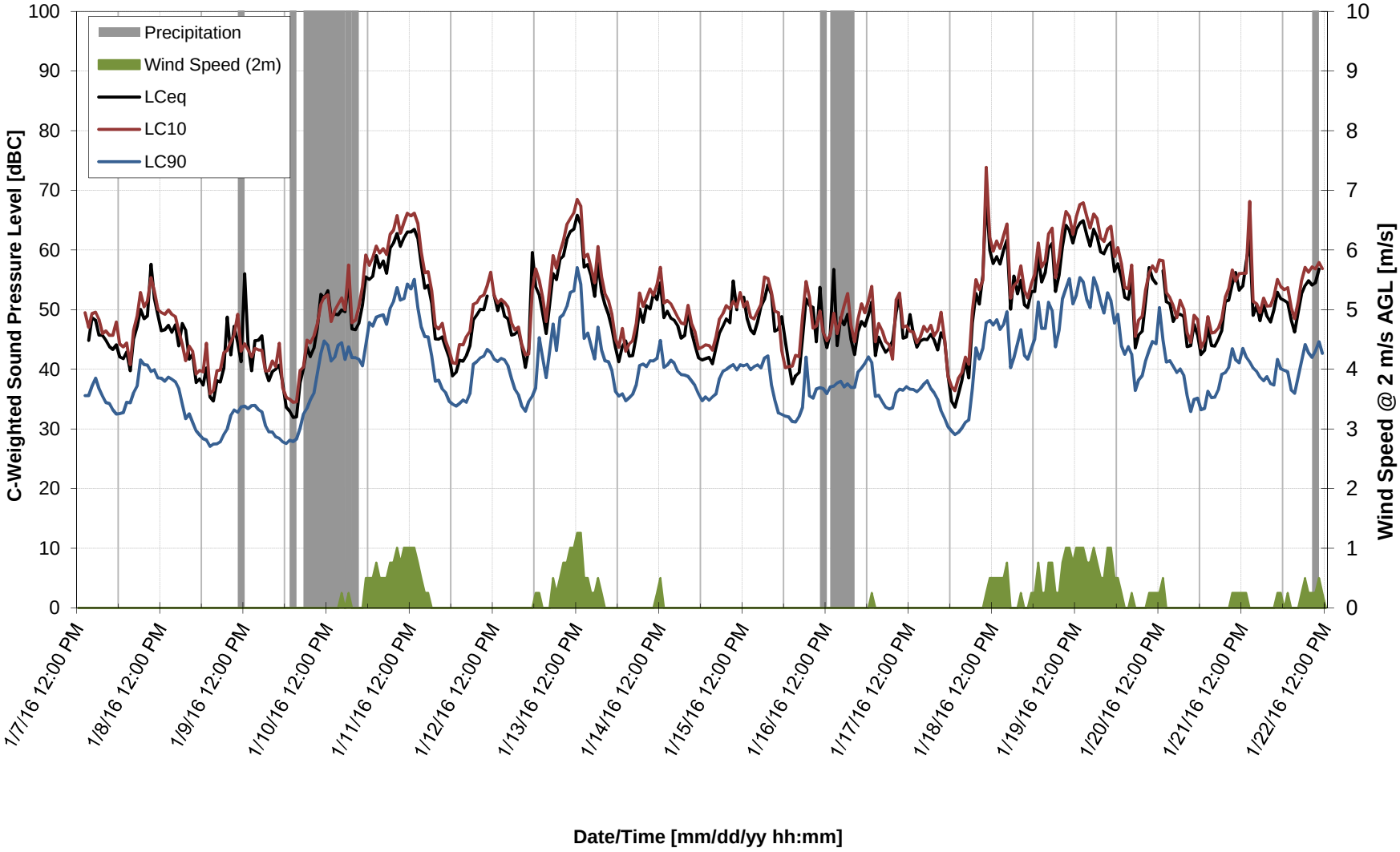


Figure B-5
A-Weighted Sound Pressure Levels & Wind Speeds - Location L3
Thursday, January 7, 2016 through Friday, January 22, 2016

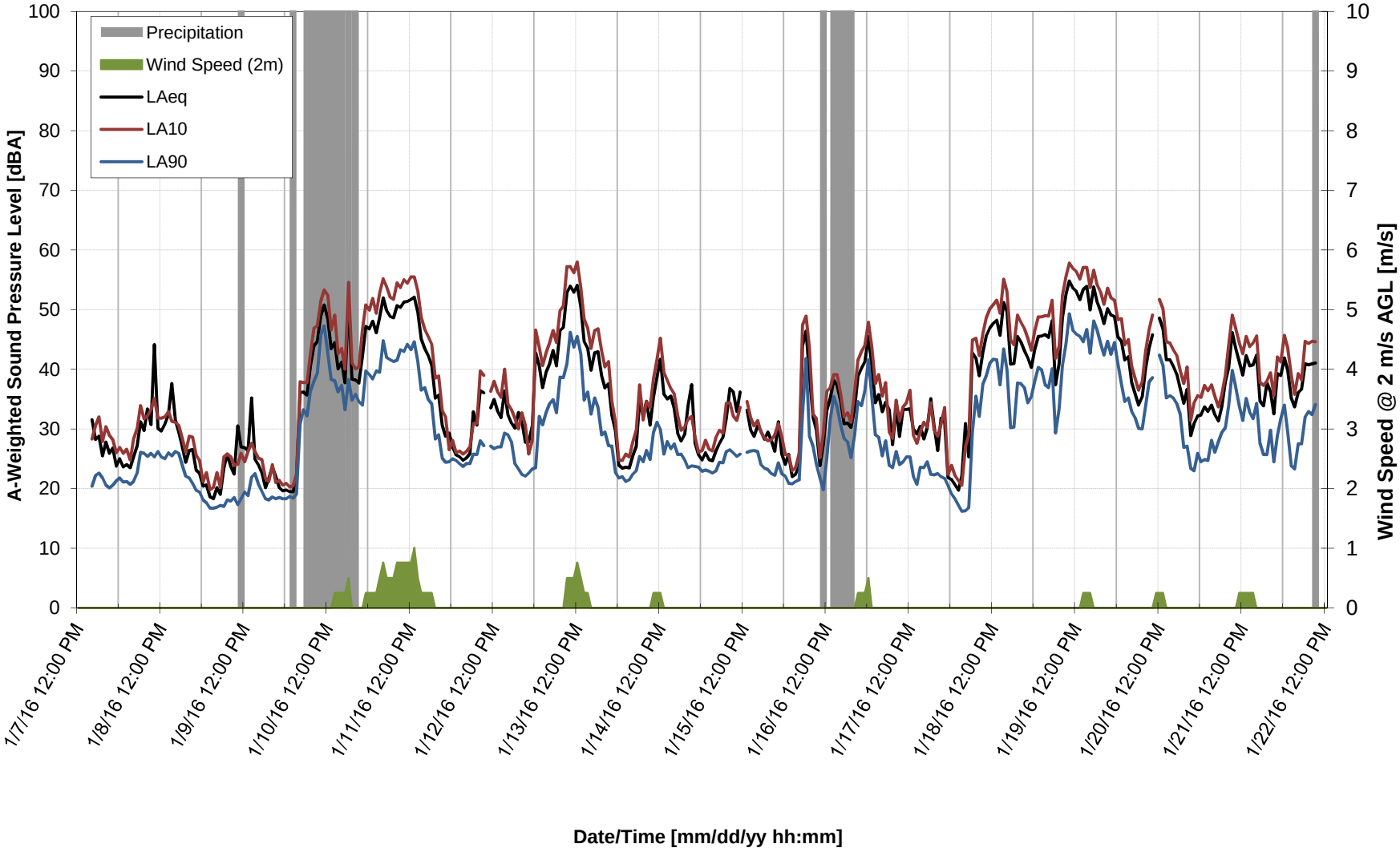


Figure B-6
C-Weighted Sound Pressure Levels & Wind Speeds - Location L3
Thursday, January 7, 2016 through Friday, January 22, 2016

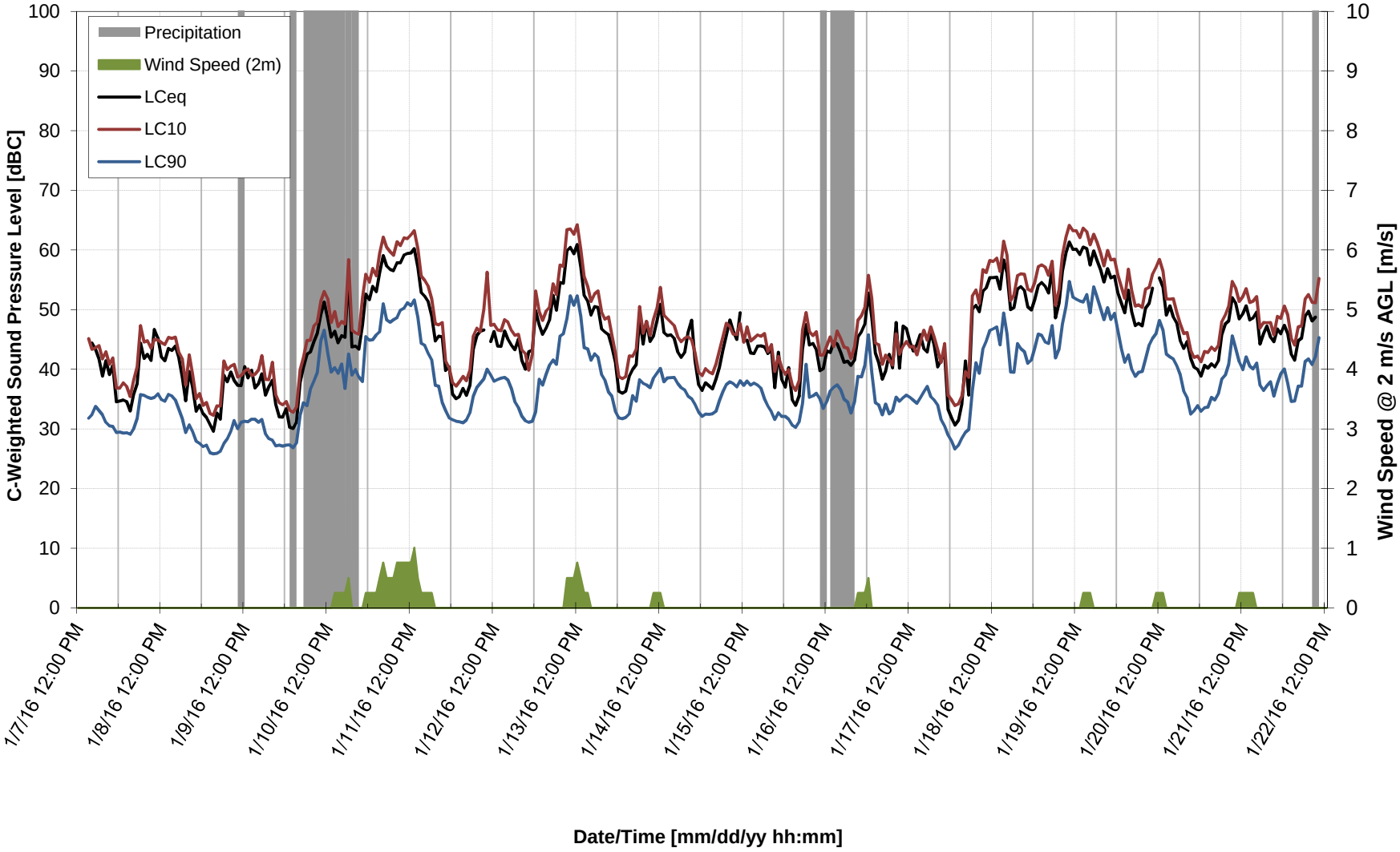


Figure B-7
A-Weighted Sound Pressure Levels & Wind Speeds - Location L4
Thursday, January 7, 2016 through Friday, January 22, 2016

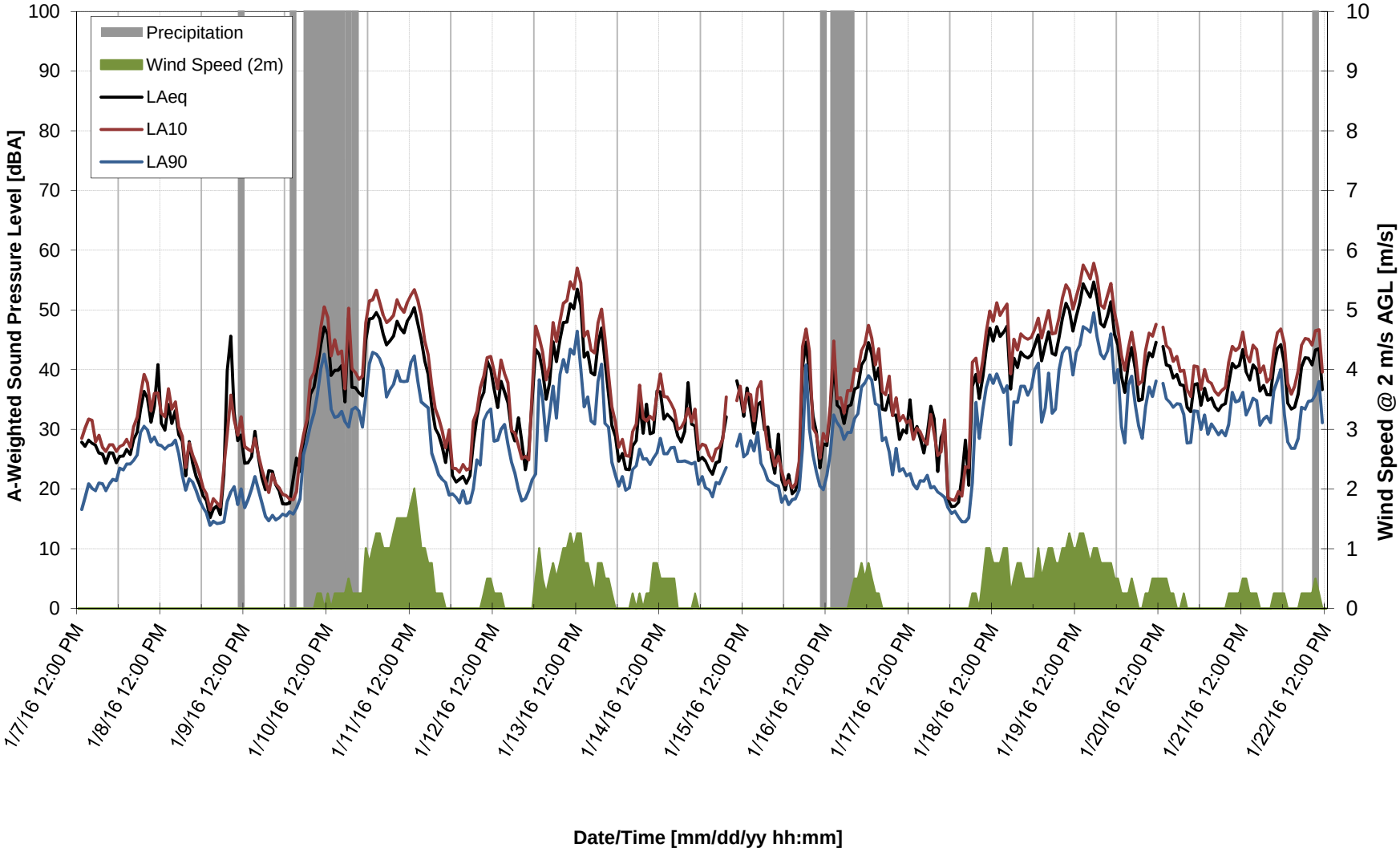


Figure B-8
C-Weighted Sound Pressure Levels & Wind Speeds - Location L4
Thursday, January 7, 2016 through Friday, January 22, 2016

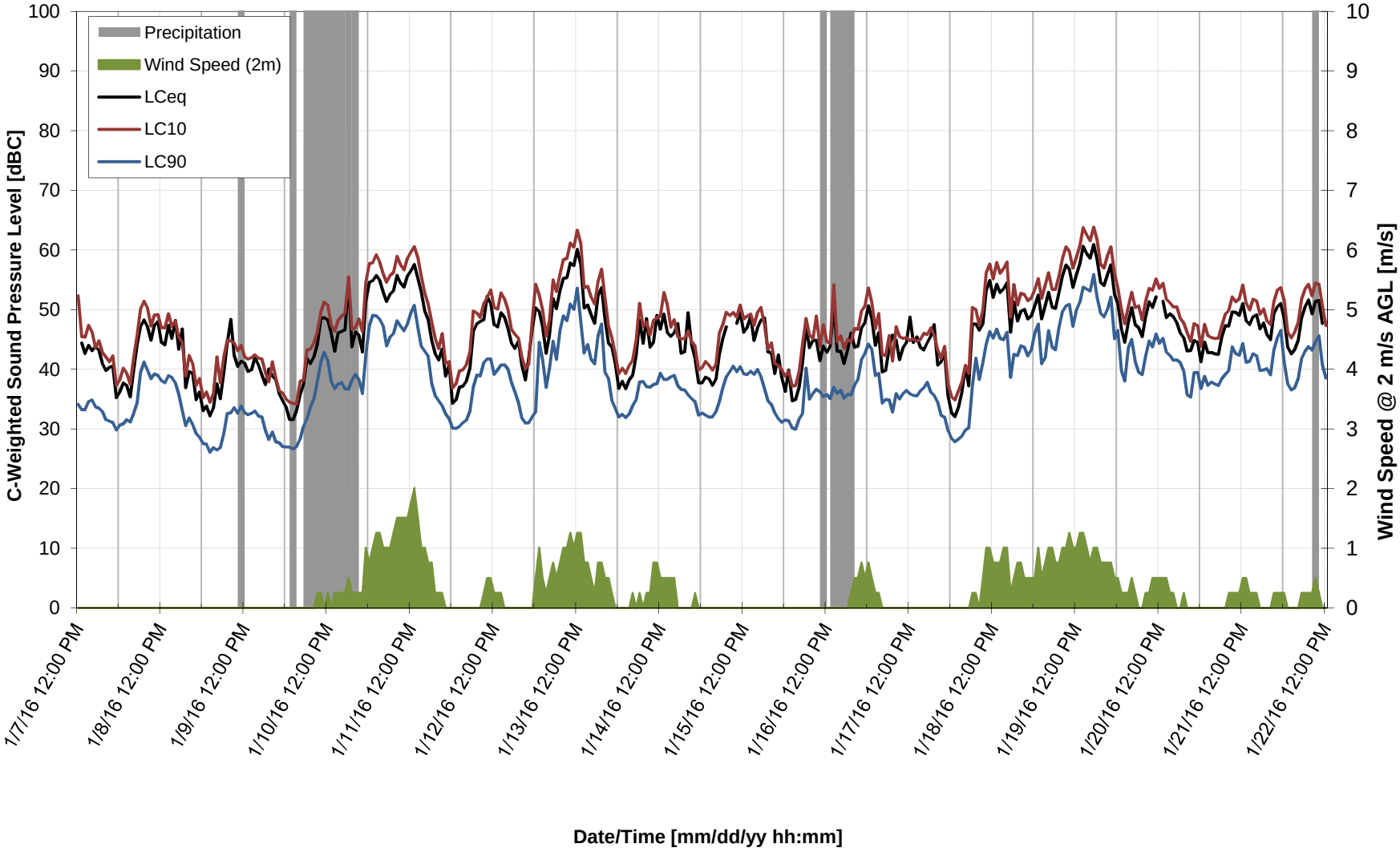


Figure B-9
A-Weighted Sound Pressure Levels & Wind Speeds - Location L5
Thursday, January 7, 2016 through Friday, January 22, 2016

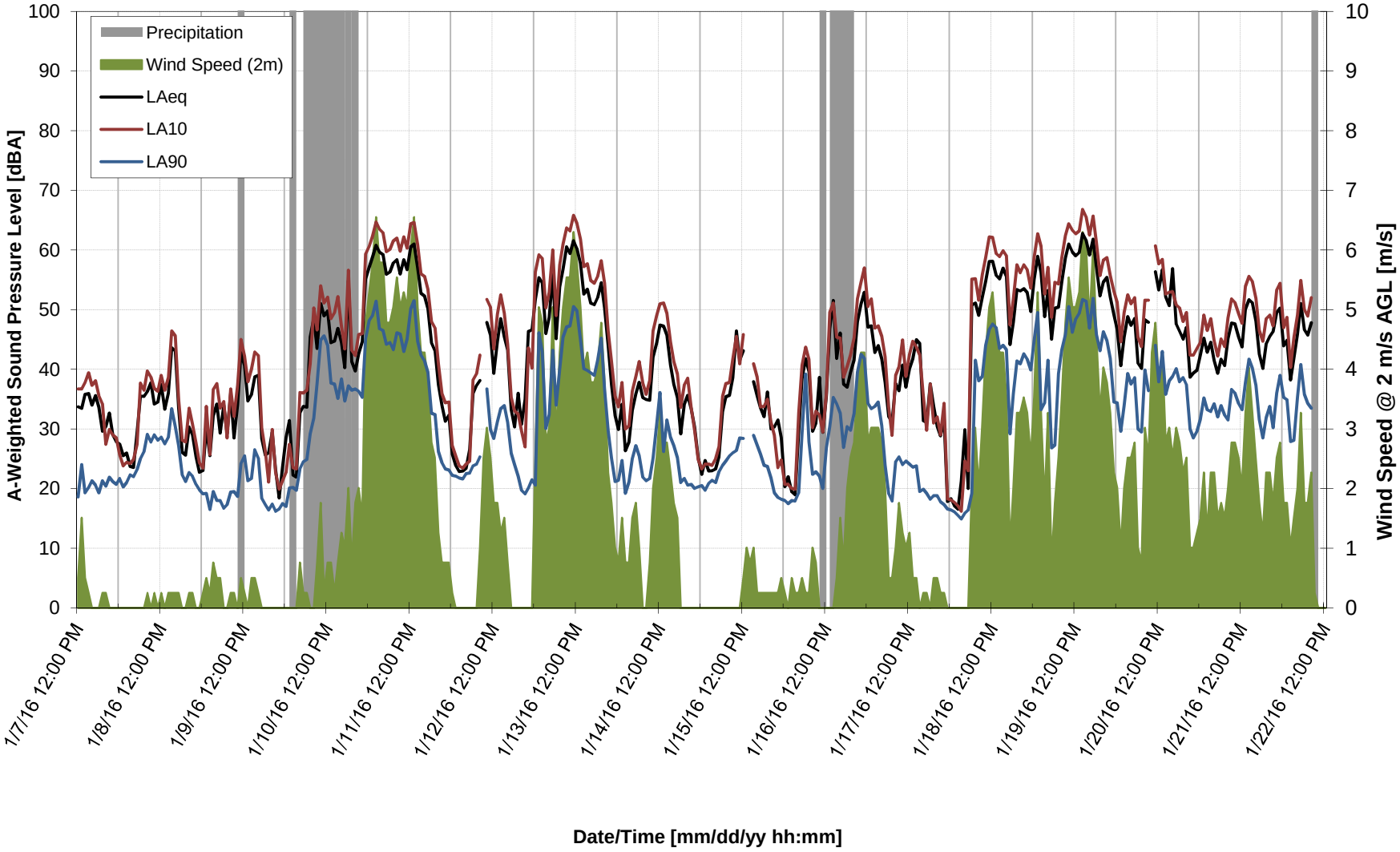
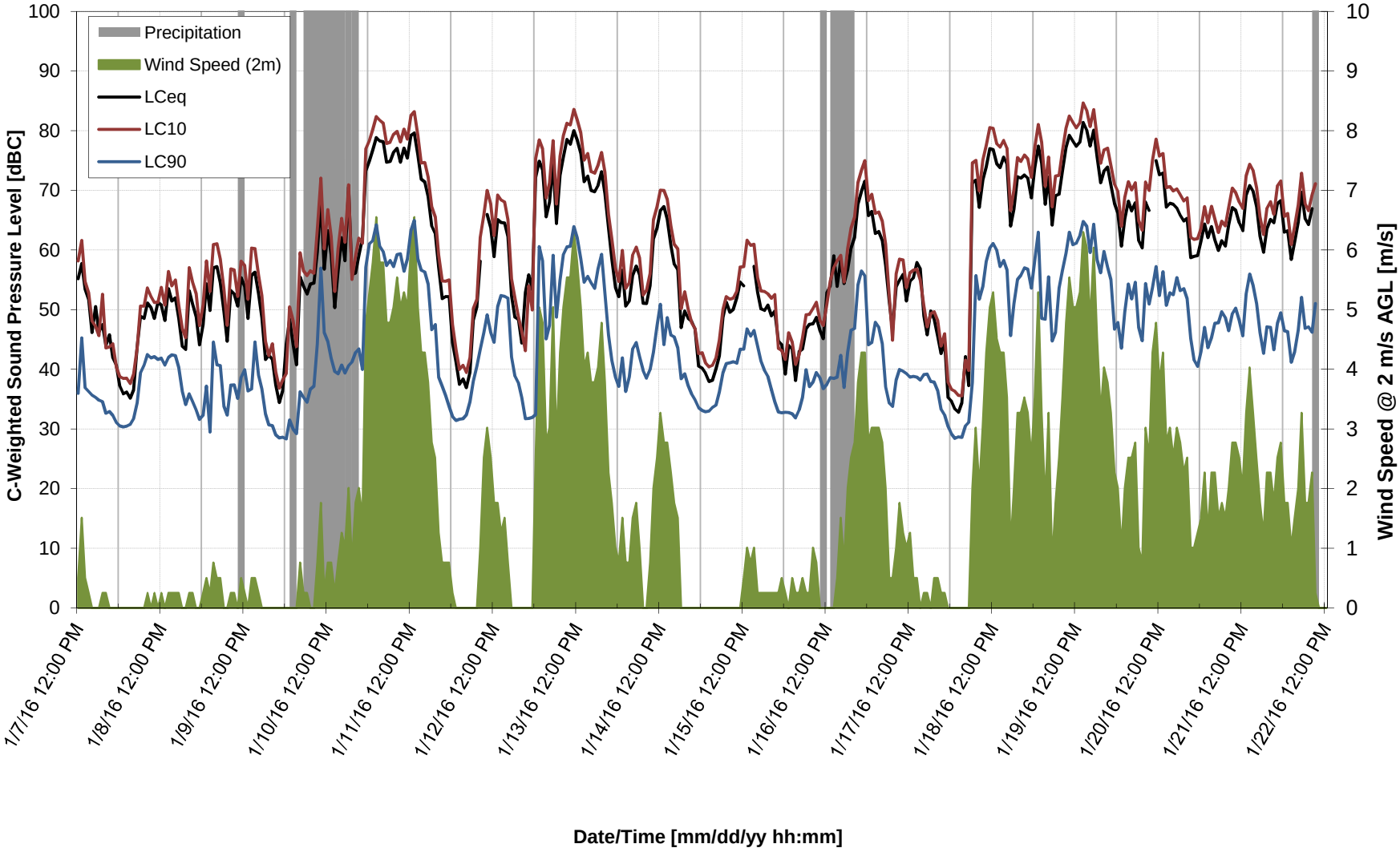


Figure B-10
C-Weighted Sound Pressure Levels & Wind Speeds - Location L5
Thursday, January 7, 2016 through Friday, January 22, 2016



Appendix C
Modeling Receptor Locations

Receptor ID	Structure Type	POINT_X	POINT_Y
1	Trailer	271038	63320
2	Commercial	271199	63481
3	House	271549	63740
4	House	271566	63748
5	Shed	271538	63766
6	Shed	271528	63772
7	House	271642	63874
8	House	271855	64020
9	Trailer	271860	64045
10	Trailer	271853	64041
11	Trailer	271872	64042
12	House	271837	64092
13	House	271698	64004
14	Barn	271707	64020
15	House	271230	64248
16	House	271177	64285
17	House	271151	64391
18	State Misc.	270108	63129
19	Shed	270075	63129
20	House	272139	63966
21	House	272604	64072
22	Shed	272631	64072
23	House	272821	64072
24	House	273208	63878
25	House	273244	63869
26	Barn	273252	63908
27	House	273279	63858
28	Barn	273179	63944
29	House	273342	63973
30	House	273354	64054
31	House	273356	64038
32	House	273200	64193
33	House	273333	63694
34	House	273302	63644
35	House	273273	63665
36	House	273541	63762
37	House	273464	63806
38	Barn	273460	63901
39	Shed	273443	63923
40	House	273454	63950
41	House	273458	64018
42	House	273402	64093
43	House/Trailer	273399	64144
44	House	273137	64360
45	Barn	272991	64363
46	House	272946	64346
47	Barn	272849	64260
48	House	272825	64261
49	House	272361	64110
50	House	272179	64085

Receptor ID	Structure Type	POINT_X	POINT_Y
51	House	272101	64063
52	House	272014	64041
53	House	273325	63513
54	House	273391	63494
55	Shed	273379	63494
56	House	273314	63382
57	Shed	273297	63344
58	Barn	273228	63238
59	House	273320	63284
60	House	273330	63263
61	House	273343	63248
62	House	273347	63110
63	House	273360	62895
64	House	273381	62733
65	Shed	273392	62743
66	House	273417	62477
67	House	273192	62055
68	Shed	273190	62036
69	House	273255	62196
70	Shed	273276	61962
71	Shed	273223	62002
72	Trailer	273232	62214
73	Trailer	273244	62210
74	House	273027	61758
75	House	273004	61664
76	House/Trailer	273088	61021
77	House	270089	62001
78	House	269895	62588
79	House	269904	62570
80	Shed	269941	62599
81	Barn	272734	59740
82	House	272759	59743
83	House	272773	59753
84	House	272939	59799
85	Trailer	271491	63837
86	House	269750	61392
87	Shed	269743	61387
88	House	269815	62012
89	Camp	269848	61946
90	Circ Hut, UnkUse	269701	62153
91	House	271032	64558
92	Barn	271021	64582
93	House	271327	64768
94	House	273068	64844
95	House	273124	64739
96	House	273071	64533
97	Shed	273131	64554
98	Garage	273254	64690
99	House	273266	64677
100	Garage	273330	64530

Receptor ID	Structure Type	POINT_X	POINT_Y
101	House	273329	64506
102	House	273456	64561
103	Barn	273257	64824
104	House	273265	64780
105	House	273747	64388
106	House	273719	64417
107	Shed	273745	64401
108	House	273630	64185
109	House	273859	64142
110	House	273867	63820
111	House	273621	63739
112	House	273634	63747
113	Shed	273695	63731
114	House	273439	62762
115	House	273747	63338
116	House	273788	63342
117	Barn	273769	63349
118	House	274076	62871
119	Barn	274080	62890
120	Garage	274069	62898
121	House	274088	62806
122	House	274127	62772
123	House	274147	62718
124	House	274166	62677
125	House	274249	62483
126	House	274250	62444
127	House	274303	62365
128	House	273794	62336
129	House	273873	62349
130	Barn	273892	62350
131	House/Trailer	273937	62356
132	House	273959	62365
133	House	274003	62457
134	House	274094	62351
135	Garage	274080	62353
136	House	274213	62357
137	House	274170	62475
138	House	274142	62546
139	House	269754	62331
140	Barn	269764	62355
141	House	269764	62459
142	House	269754	62517
143	Shed	269712	62603
144	House	269739	62567
145	House	273031	61848
146	House	273354	63183
147	Barn	273217	64159
148	House	272284	64096
149	House	271819	64076
150	House	269874	62153

Receptor ID	Structure Type	POINT_X	POINT_Y
151	House	269008	63960
152	Barn	268933	64112
153	House	271216	57312
154	House	271113	57514
155	House	273343	58844
156	House	273222	58971
157	Garage	273227	58984
158	House	273190	59025
159	House	273162	59035
160	Trailer	273178	59051
161	House	273134	59100
162	Barn	273120	59109
163	House	273113	59162
164	House	273078	59295
165	Shed	273042	59298
166	House	273110	59614
167	House	273235	59605
168	House	273071	59850
169	Barn	273071	59837
170	House	273204	59967
171	House	273574	59526
172	House	273626	59730
173	Camp	273688	59598
174	House	273506	59798
175	House	273748	59832
176	House	273559	59878
177	Shed	273556	59855
178	Shed	273583	59820
179	House	273733	59854
180	House	273224	60190
181	House	273401	60244
182	House	273442	60291
183	House	273479	60334
184	House	273984	60507
185	House	274021	60467
186	House	274037	60487
187	House	274054	60498
188	House	274051	60445
189	House	274075	60482
190	House	274101	60452
191	House	274130	60449
192	House	274173	60420
193	House	274194	60407
194	House	274245	60530
195	House	274244	60563
196	House	274243	60311
197	House	274262	60285
198	House	274296	60356
199	House	274281	60272
200	House	274296	60259

Receptor ID	Structure Type	POINT_X	POINT_Y
201	House	274425	60296
202	House	274416	60441
203	House	274294	60207
204	House	274309	60197
205	Shed	274333	60193
206	House	274351	60183
207	House	274388	60168
208	House	274213	60817
209	House	273965	61140
210	Barn	274065	61174
211	Barn	274043	61229
212	House	274324	61760
213	Garage	274319	61774
214	House	274321	61629
215	Garage	274317	61644
216	Garage	274537	61728
217	House	274552	61726
218	House	274568	61852
219	House	274654	61923
220	House	274652	61664
221	Shed	274707	61665
222	Shed	274696	61691
223	House	274742	61678
224	House	275143	61506
225	Garage	275129	61500
226	House	275244	61490
227	House	275257	61474
228	House	275252	61460
229	House	275260	61509
230	House	275305	61766
231	House	275155	61825
232	House	275161	61841
233	House	275026	61810
234	Shed	275159	61806
235	House	275018	61835
236	House	274781	61933
237	House	274814	61911
238	House	274927	62067
239	House	274574	62241
240	House	274478	62188
241	House	274348	62268
242	Barn	274335	62270
243	Shed	274556	62217
244	House	274854	62296
245	House	275478	62148
246	House	274952	62204
247	House	275013	62158
248	Garage	274937	62107
249	Garage	275023	62133
250	House	274779	62914

Receptor ID	Structure Type	POINT_X	POINT_Y
251	House	275020	62452
252	Garage	275012	62437
253	House	275103	62569
254	House	275082	62625
255	House	274993	62657
256	House	274975	62718
257	House	274974	62739
258	House	275081	62733
259	House	275200	62758
260	Barn	275203	62784
261	House	274967	62830
262	House	275033	62839
263	House	275033	62900
264	House	274929	63100
265	House	274867	63585
266	Barn	274846	63575
267	House	274895	63728
268	House	274921	63756
269	House	274752	63797
270	House	274931	63863
271	Barn	274738	63810
272	House	274757	64045
273	House	274773	64039
274	House	274767	64109
275	Garage	274762	64120
276	House	274337	63459
277	House	274358	63538
278	House	274445	63519
279	Barn	274155	63796
280	Trailer	274202	63812
281	House	274278	63847
282	House	274324	63862
283	Shed	274329	63845
284	House	274272	63812
285	House	274279	63831
286	House	274943	64350
287	House	274839	64384
288	House	274548	64450
289	House	275011	64544
290	House	274862	64511
291	House	274740	64531
292	House	274745	64570
293	Garage	274735	64557
294	House	274614	64567
295	House	274651	64525
296	House	274603	64557
297	House	274668	64528
298	House	274772	64623
299	House	274474	64724
300	House	274330	64799

Receptor ID	Structure Type	POINT_X	POINT_Y
301	House	274766	64674
302	House	274730	64678
303	Garage	274723	64670
304	House	274791	64685
305	House	274829	64722
306	House	274792	64722
307	Trailer	274774	64733
308	House	274732	64700
309	House	274709	64731
310	Shed	274625	64697
311	House	274697	64762
312	House	274466	64848
313	House	274577	64919
314	Barn	274481	64906
315	House	274595	64954
316	House	274578	64938
317	House	274792	64981
318	Shed	274754	64995
319	Barn	274782	65026
320	House	274036	64813
321	House	273922	64808
322	Garage	273933	64796
323	House	273771	64820
324	Garage	273741	64817
325	Shed	273697	64857
326	House	273460	64995
327	Garage	273407	64783
328	House	273429	64792
329	House	273150	64952
330	House	273064	64977
331	Garage	273079	64985
332	Garage	273183	64993
333	House	273633	65203
334	House	273614	65300
335	House	273496	65327
336	Garage	273535	65305
337	House	273773	65542
338	Barn	273782	65571
339	House	271114	64826
340	House	271230	64904
341	House	271236	65132
342	House	271158	65057
343	Barn	271175	65040
344	House	271208	65038