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Wyle Report

WR 08-34

**Sound Testing and
Analysis for Noise
Generated by Tenaska
Power Generating Station**

Job No. T10675

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Executive Summary

Environmental noise monitoring and analysis were conducted in the vicinity of Tenaska Power Generating Station located in Fluvanna County, Virginia. The study was performed to assess noise generated by the station and to determine compliance with Special Use Permit 00:99 for power production plants, limiting the noise levels attributable to plant operations at the property line and at any adjacent dwelling.

The noise monitoring program consisted of collecting the noise level data in five locations, including one reference location near the Tenaska power generating facilities, two locations at the station property line, and two locations at nearby residences. The noise measurements were conducted continuously throughout the eight-day period in August 2008.

The noise data obtained were analyzed and compared with the SUP 00:99 requirements. During the noise monitoring period, the sound levels at the two Tenaska property line locations complied with the SUP.

The sound levels measured at the two residential locations were also in compliance with the SUP requirement most of the time. However, the SUP requirement was consistently exceeded in the residential locations every day during the evening hours, likely due to increased insect noise. The SUP requirement was also exceeded during several limited time periods with excessive noise likely attributable to the Tenaska station operations.

Additional detailed noise measurements will be necessary to determine specific source(s) of excessive noise generated by the station operations.

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1.0 Introduction

County of Fluvanna retained Wyle Laboratories, Inc. to conduct sound testing and analysis for noise generated by Tenaska Power Generation Station located near Scottsville, Virginia in the Charlottesville metropolitan area. Operations of the station produce noise in the surrounding area. Certain conditions were imposed on the operations of the Tenaska Station by Special Use Permit 00:99 (SUP) approved by the County, limiting the noise levels attributable to plant operations at the property line and at any adjacent dwelling. In response to complaints registered by the surrounding community, the County of Fluvanna set the goals of conducting noise measurements to determine compliance with the SUP for power production plants and possible additional noise measurements to determine the source of noise generated by the station operations.

Tenaska Power Generation Station is located in a rural area off Rt. 761, Branch Road and is surrounded by forest. Electrical power is generated using a combined cycle dual fuel gas turbine and steam turbine generating system. The nearest residences are located along Rt. 688, Hidden Valley Road and Rt. 680, Paul Bragg Road at a distance of 0.5 and 0.8 miles, respectively, from the station facilities.

To determine compliance with the SUP requirements, Wyle conducted a noise monitoring program at Tenaska Station and adjacent residential properties. The test plan was developed and presented to the County. The noise measurements were performed in five locations selected in consultations with the County and the station and residents representatives. The program was accomplished through an eight-day measurement effort in August 2008.

This report summarizes the results of this effort and provides analysis of the noise measurement data collected. The SUP noise requirements are reviewed in Chapter 2.0. The noise monitoring effort is described in Chapter 3.0. The noise measurement data collected are presented and analyzed in Chapter 4.0. Conclusions for the study are provided in Chapter 5.0.

2.0 Special Use Permit Noise Requirements

The Special Use Permit SUP 00:99 was approved by the County in November 2000 in order to permit the operation of a power production plant at the property, which was, zoned A-1 Agricultural General. The Noise Attenuation condition attached to the SUP states that “noise attenuation measures will be implemented to ensure that noise levels attributable to plant operations will be kept to an L_{90} reading of 60 dBA (decibels) or less at the property lines and 50 dBA or less at any adjacent existing dwelling”.

The statistical A-weighted sound level L_{90} referred to in the SUP is the sound level that is exceeded 90 percent of the time during a measurement interval. L_{90} is typically regarded to represent the background noise level in the absence of any identifiable noise sources. The use of this metric in the SUP suggests that the background noise in the vicinity of Tenaska Power Station is considered attributable to its operations. There are typically other sources that may also contribute to the overall background noise in the environment, such as vehicular traffic, emergency vehicle sirens, aircraft flyovers, or other local activities (lawn mowing, various mechanical equipment, etc).

“A-weighted” denotes the frequency weighting of the sound energy, representing the way the human ear responds to that sound. The A-weighting characterizes an average person’s subjective perception of sound and is most widely used in measurements of community environmental noise. Sound levels that are measured in logarithmic units known as the decibels (abbreviated dB) using A-weighting are called A-weighted sound levels and are denoted by the unit dBA. The use of the A-weighting is consistent throughout the report.

Another clause in the SUP limiting noise levels of construction activities at the plant property lines is of no concern for the current study.

3.0 Noise Monitoring

The noise monitoring program was conducted from Tuesday, August 12 through Tuesday, August 19, 2008. The noise data was collected in selected locations continuously throughout the 8-day period. The noise monitoring locations, measurement equipment set-up and noise metrics used, as well as weather conditions at the site are described below.

3.1 Noise Monitoring Locations

Noise measurements were performed at five locations selected in consultations with the County and the station and residents representatives. Five sound level meters (SLM) were installed at the measurement locations, with one reference SLM near the Tenaska power generating facilities, two SLMs at the station property line, and two SLMs at nearby residences.

Table 3-1 provides the UTM coordinates for the noise monitoring locations obtained using a Garmin GPS receiver. The noise monitoring locations designated P1 through P3 (Tenaska property) and R1 and R2 (residential) are depicted in Figure 3-1.

Table 3-1. Noise Measurement Locations

Location	Description	UTM Coordinates (meters)	
		X (East)	Y (North)
P1	Southeastern Property Line	0731446	4193899
P2	Northeastern Property Line	0730703	4194894
P3	At Power Generating Station	0730602	4194332
R1	986 Hidden Valley Road	0729939	4193500
R2	Residence at Paul Bragg Road	0741943	4194607

UTM Coordinates (Datum WGS84) in Zone 17S

Location P3 for the reference SLM was selected near the station security fence, within the direct line-of-site to the station in order to represent noise from the power generating facilities. Locations P1 and P2, and R1 and R2 represented the station property lines and adjacent existing dwellings, respectively.

3.2 Noise Measurement Setup

At all five noise monitoring locations, continuous 24-hour noise measurements were taken using Larson-Davis Model LD-820 sound level meters. These instruments are battery operated, digital storage ANSI Type I meters which acquire noise data automatically. The sound level meters were programmed to collect the following information:

- ▶ Statistical A-weighted sound level L_{90} that was exceeded 90 percent of the time for five-minute intervals, as prescribed by SUP 00:99;
- ▶ Statistical A-weighted sound levels L_{10} and L_{50} that were exceeded 10 and 50 percent of the time, respectively, for the same intervals; and
- ▶ Energy average A-weighted sound levels (L_{eq}), maximum (L_{max}), and minimum (L_{min}) sound levels for the same intervals.



Figure 3-1. Noise Monitoring Locations

By analogy with L_{90} , the statistical sound level L_{10} is typically regarded to represent the loudest noise events measured, and the level L_{50} - the median noise level. The energy average, or equivalent sound level (L_{eq}), determines the average level of noise over a specified time period. The maximum (L_{max}) and minimum (L_{min}) sound level metrics during a time interval are self-explanatory. These metrics were collected since they are useful for noise analysis.

All sound levels collected throughout the monitoring program were measured using the "slow response" characteristic (time constant of a sound level meter), which is standard industry practice in measuring environmental noise. The measurements included all measurable noise sources such as vehicular traffic, emergency vehicle sirens, aircraft flyovers, and other local activities (for example, lawn mowing, various mechanical equipment, etc) at each site.

At the monitoring sites, each SLM was placed inside an environmental box and connected using an extension cable to the exterior microphone, which was positioned on a tripod, a tree branch, or directly on a chain link fence at 5 ft above the ground and equipped with a windscreen. All SLMs were time synchronized. To ensure the SLMs were operating within tolerance, all were calibrated using a Bruel & Kjaer Type 4231 acoustic calibrator before and after the measurement period. The calibration level did not significantly drift over the duration of the study for any of the SLMs.

The noise measurement data collected by each SLM for five-minute time intervals were post-processed in a laboratory to obtain the sound levels averaged over one-hour intervals (Hourly L_{90} , L_{eq} , L_{max} , and L_{min}) more suitable for describing general environmental noise. The noise monitoring results are presented and discussed in detail in Chapter 4.0.

3.3 Weather Conditions

Hourly weather data was obtained from the University of Wyoming's Department of Atmospheric Science for Charlottesville-Albemarle Airport, Louisa County Airport/Freeman Field, and Orange County Airport. Winds gusts exceeding 10 mph were reported for the following periods:

- ▶ August 12, from 6 p.m. to 9 p.m.
- ▶ August 13, from 3 p.m. to 9 p.m.
- ▶ August 14, from 8 p.m. to 9 p.m.
- ▶ August 15, from 6 p.m. to 7 p.m.
- ▶ August 17, from 3 p.m. to 4 p.m.
- ▶ August 18, from 2 p.m. to 4 p.m.

Rain was reported for the following periods:

- ▶ August 13, from 10 p.m. to midnight
- ▶ August 14, from 4 p.m. to 5 p.m. and 8 p.m. to 9 p.m.
- ▶ August 15 from midnight to 1 a.m. and 2 p.m. to 4 p.m.

The inclement weather may have affected the measurement results for those time periods due to rain and wind gusts. The weather data obtained from the nearby airports were used in the analysis that follows in Chapter 4.0. As for most environmental noise measurements, collecting the weather data at numerous individual noise measurement locations was not considered practical or beneficial.

4.0 Noise Monitoring Results

The noise monitoring data collected and post-processed as described in Chapter 3.0 is detailed and discussed below. Individual hourly data for each measurement location and day of monitoring is tabulated in Appendix A for each location. The data obtained are analyzed and compared with the noise requirements of SUP 00:99.

4.1 Noise Data

The hourly L_{90} , L_{eq} , L_{max} , L_{min} , L_{10} , and L_{50} sound levels computed from the measured 5-minute intervals are presented for all five measurement locations in Tables 1 through 5 of Appendix A. The tables also provide daily average sound level values, calculated from the hourly levels for the complete calendar days of measurements. These include the daytime (07:00–22:00) average sound level LD, nighttime (00:00–07:00 and 22:00–24:00) average sound level LN, day-night average sound level DNL, and daily (24-hour) average sound level L_{mean} . These metrics are not addressed in the SUP, and are provided in this report for general reference. Among these noise metrics, DNL is the one most often used for assessing community noise environment. The DNL is a weighted average sound level, calculated based on the noise levels over a 24-hour calendar day, with a 10-decibel penalty added to noise levels from Midnight to 7 a.m. and from 10 p.m. to Midnight.

A summary of the hourly noise data collected during the noise monitoring period is provided in Table 4-1. The range of hourly L_{90} shows the minimum and maximum values of the hourly sound levels L_{90} measured for each location, based on the data provided in Appendix A. The table also shows similar ranges for the measured DNL and hourly average L_{eq} levels.

Table 4-1. Noise Monitoring Summary (August 12 – August 19, 2008)

Location	Range of Hourly L_{90} dBA	Range of DNL dBA	Range of Hourly L_{eq} dBA
R1	34 – 57	54 – 57	39 – 58
R2	34 – 56	51 – 55	36 – 58
P1	31 – 55	52 – 57	33 – 57
P2	36 – 55	53 – 59	38 – 57
P3	53 – 68	66 – 71	54 – 70

The 5-minute L_{90} and L_{eq} measured at each location during the monitoring period are depicted in Figures 4-1 through 4-5. The periods of rain and wind gusts exceeding 10 mph are also indicated in the figures. The maximum allowable sound levels are shown for the residential properties and the Tenaska property line locations.

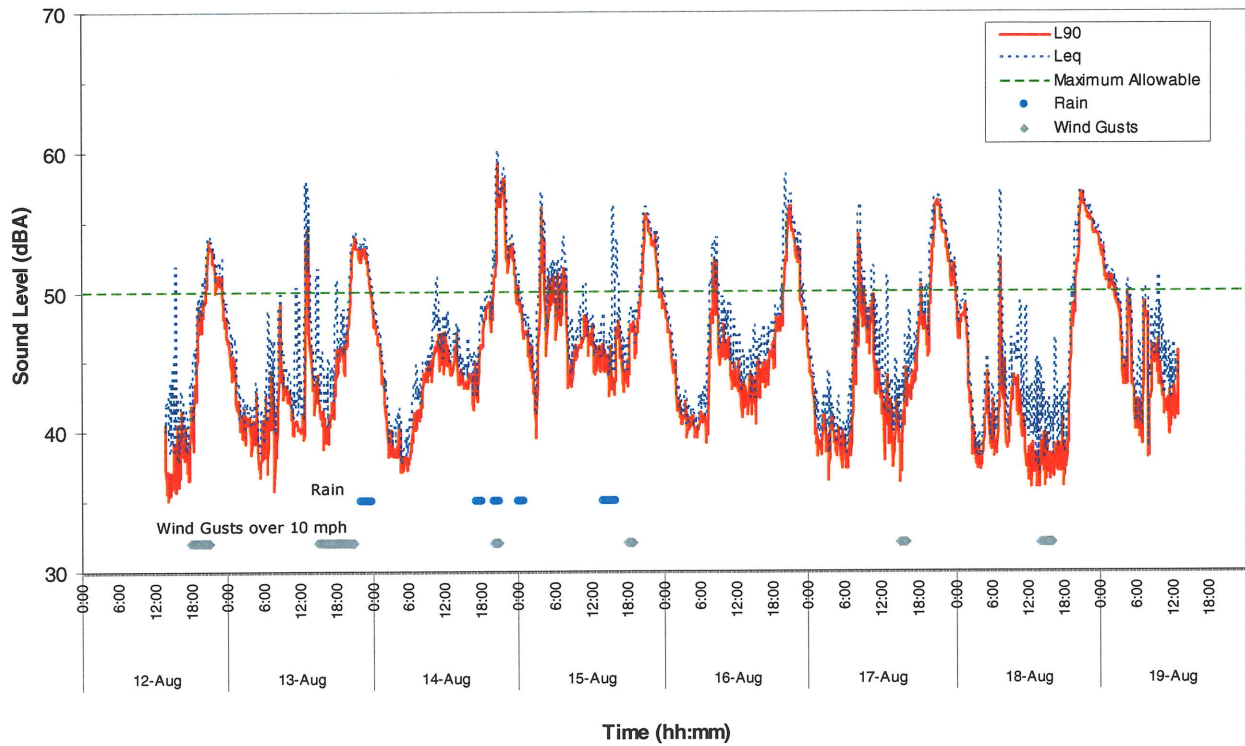


Figure 4-1. Sound Levels Measured at Location R1

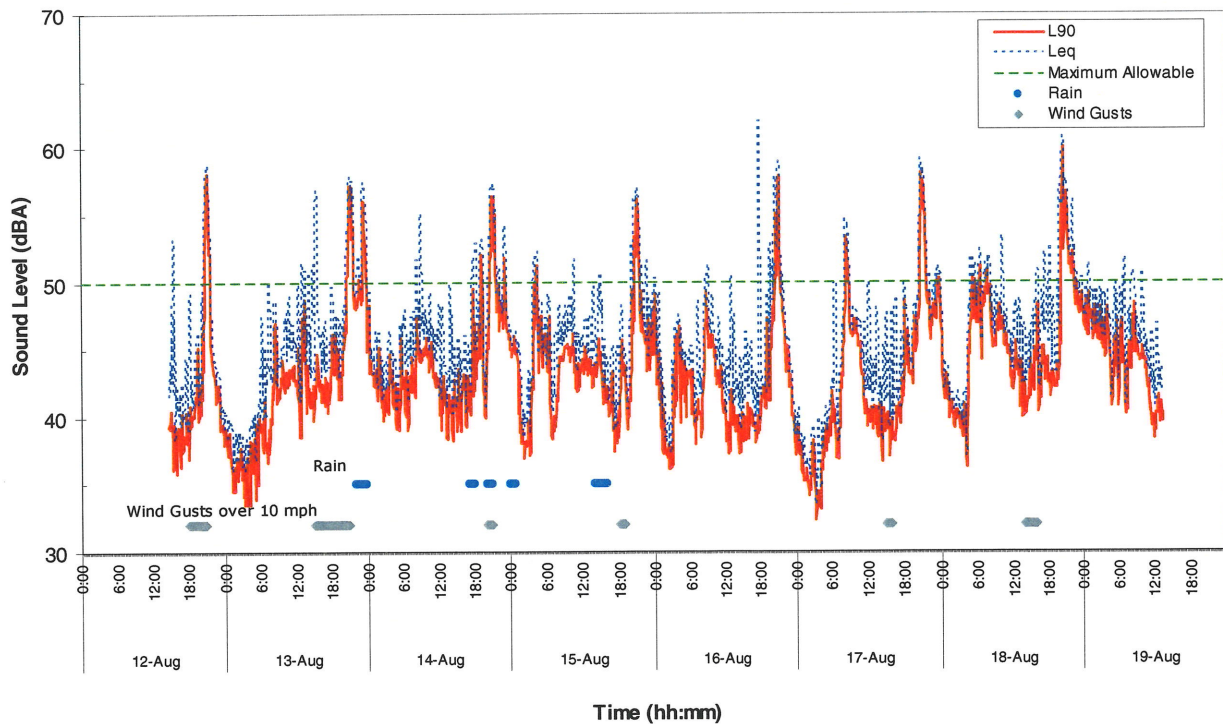


Figure 4-2. Sound Levels Measured at Location R2

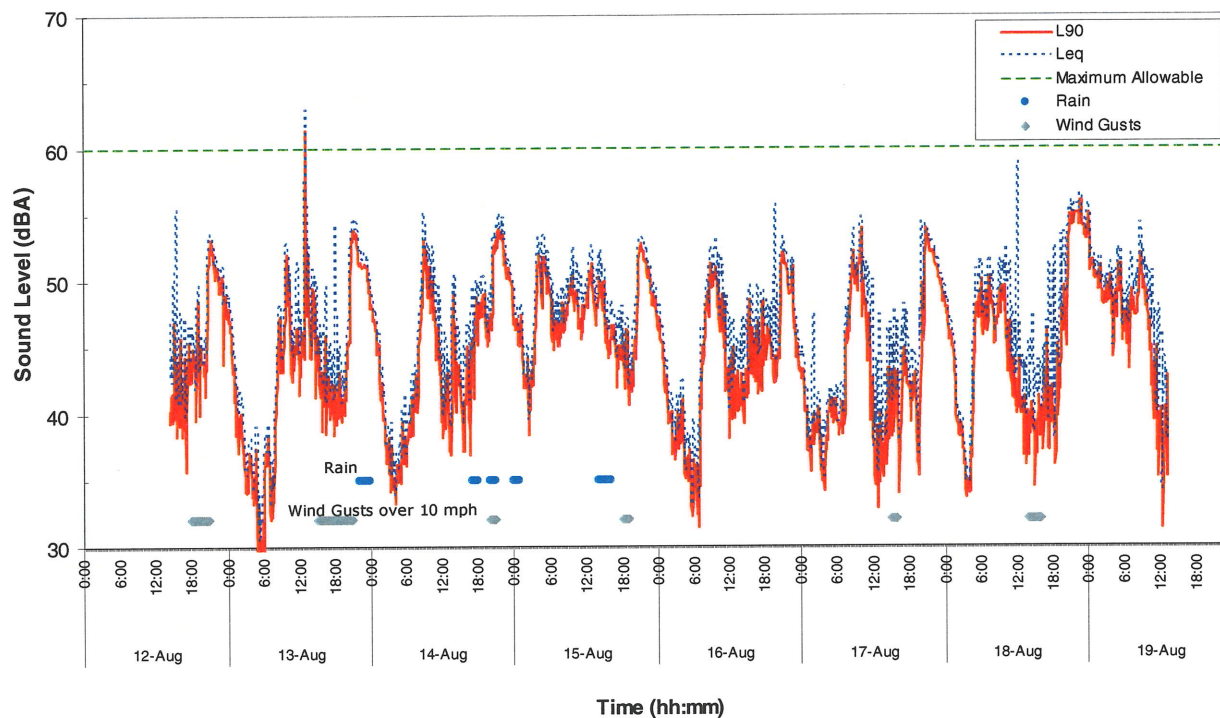


Figure 4-3. Sound Levels Measured at Location P1

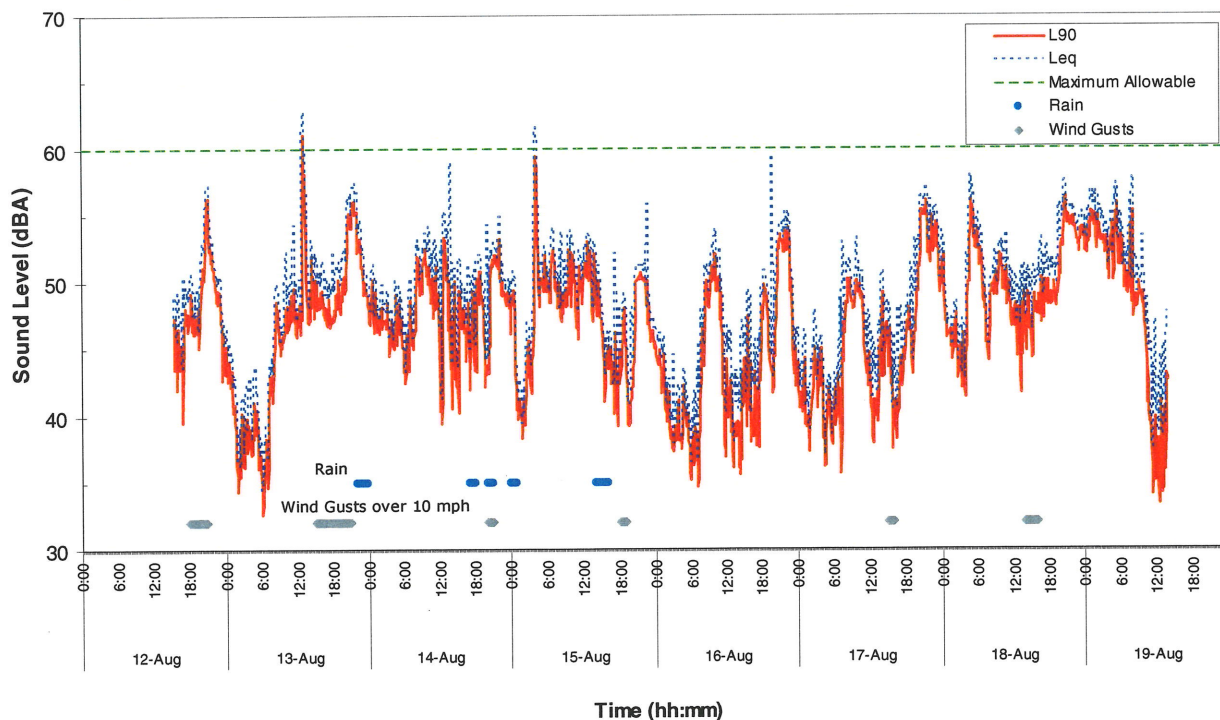


Figure 4-4. Sound Levels Measured at Location P2

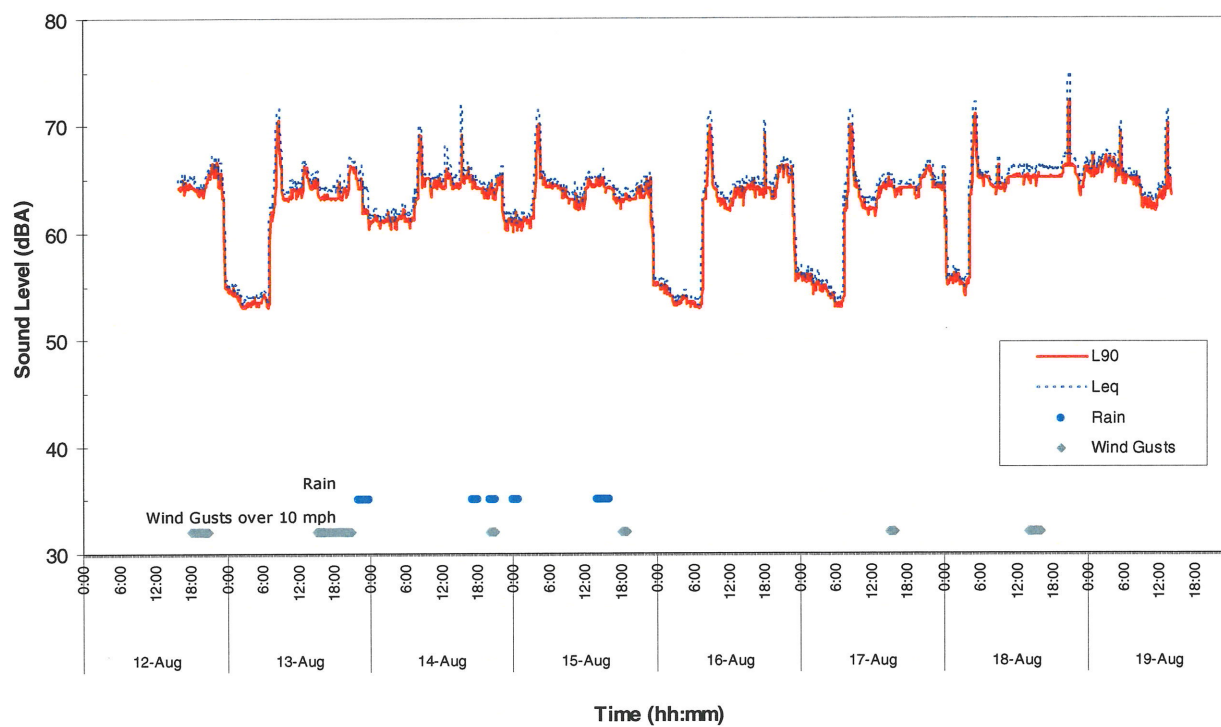


Figure 4-5. Sound Levels Measured at Location P3

4.2 Noise Data Analysis

Analysis of the data presented in Table 4.1 and Figures 4-1 through 4-5 indicates that the sound levels measured in the residential locations R1 and R2 and the property line locations P1 and P2 varied during the measurement period in similar wide ranges. Clearly, the sound levels at the reference location P3 near the power generating facilities were 10 to 15 dB higher and varied in a more narrow range.

Certain diurnal patterns can also be observed in the sound levels measured at all the locations, with deep minima during the nighttime. The daytime variations, however, were also substantial. Some of these variations may be attributed to the inclement weather conditions with rain and wind gust periods listed in Section 3.3 and indicated in Figures 4-1 through 4-5. Those included primarily the evening and night hours on August 12 through 14. There are also indications that the A-weighted sound levels measured at locations R1, R2, P1, and P2 during the evenings could be affected by the high-frequency insect noise (sounds produced by cicadas, crickets, etc.).

It can be seen from Figures 4-1 and 4-2 that the 5-minute sound levels L_{90} measured in the residential locations R1 and R2 most of the time remained below the SUP requirement of 50 dBA. The time periods when this maximum allowable level was exceeded at locations R1 and R2 repeatedly occurred between approximately 8 and 11 PM every day. On August 12 through 14, the sound levels at these times could be affected by the weather conditions, as indicated above. For the remaining period from August 15 through 18, however, the sound levels in the evening hours, reaching 58 to 60 dBA, were

likely affected by the insect noise. At a preliminary review of the results with the Tenaska representative, it was indicated that the operational profile of the power generating facilities remained steady through those hours every day. The 5-minute L_{90} at the reference location P3 showed only slight increases during those time periods, also likely due to the effect of insect noise.

The sound level L_{90} measured at location R1 (the nearest residential location to the station) also exceeded the SUP requirement on August 15 between 3:40 and 7:50 AM, August 16 between 8:00 and 8:40 AM, and August 17 between 8:15 and 8:40 AM. On August 15 and 17, the limit of 50 dBA was also slightly exceeded at the residential location R2 for shorter periods within the same time frames. On August 18, the limit was slightly exceeded at both residential locations for brief intervals between 7:10 and 7:30 AM. During the periods listed, the measured L_{90} exceeded the limit by 1 to 3 dBA in most cases; on August 15, only L_{90} measured in location R1 reached 56 dBA for a period of less than 10 minutes.

The 5-minute L_{90} at the property line locations P1 and P2 (Figures 4-3 and 4-4) indicated a pattern similar to the one observed for locations R1 and R2. However, since the SUP requirement for these locations is 10 dBA higher than for the residential locations, the 5-minute L_{90} measured at P1 and P2 were below this requirement at all times during the noise monitoring period. The only exception was a loud event between 12:55 and 1:15 PM on August 13, when L_{90} at locations P1 and P2 reached up to 61 dBA. Smaller increases were measured at that time in other locations as well, but the source of that noise cannot be unambiguously identified since the inclement weather conditions were recorded a little later in the day.

At the reference location P3, nearest to the station power generating facilities, the measured sound level L_{90} showed typical peaks reaching 70 dBA every day during the morning hours and indicating the station activities (see Figure 4-5). On August 15 through 17, these peaks occurred within the same time periods when L_{90} exceeded the SUP requirement at locations R1 and R2, as discussed above. During those time periods, certain correlation between the station operations and the sound levels measured at the residences and property line was noted at the preliminary review of the results with the Tenaska representative. It is likely that changes in operational profile at the Tenaska facilities within the time periods indicated were responsible for the increased sound levels at locations R1 and R2.

In addition to the noise data collected as described above, the sound spectrum measurements were also performed in all the monitoring locations on August 12, after the SLM installation was complete at each site. The measurements were performed using a handheld Larson-Davis Model LD-820 sound level meter and lasted for about 30 seconds at each location. Figure 4-6 compares the A-weighted sound pressure spectra measured at locations R2 and P3.

It can be seen from the figure that a prominent tonal signal is present at location R2 at frequencies of 400 to 500 Hz. Similar spectra were measured in locations R1, P1, and P2. During the measurements, the source of this tonal signal could be clearly localized as emanating from the direction of the Tenaska power station. The signal is also present in the spectrum measured at location P3, but is masked there by the other noise components. The overall sound levels L_{90} measured at that time in locations R1, R2, P1 and P2 were well below the SUP requirements. However, such a tonal sound is easily perceived and can be annoying to residents, despite its low level, due to even lower ambient noise in the environment.

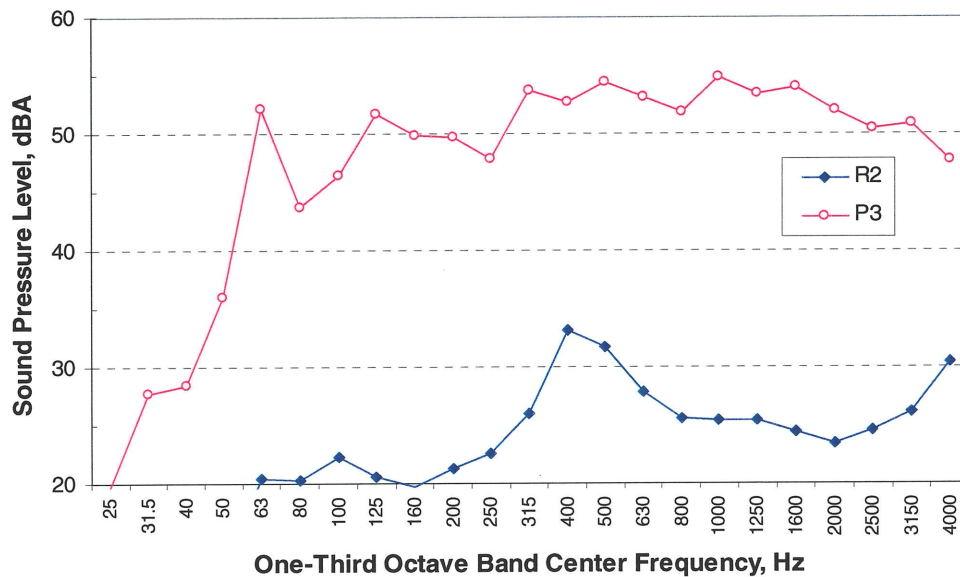


Figure 4-6. Sound Spectra Measured at Locations R2 and P3

5.0 Conclusions

The environmental noise monitoring program was conducted to assess noise generated by Tenaska Power Generation Station and to determine compliance with SUP 00:99 for power production plants. Analysis of the data collected leads to the following conclusions.

The noise monitoring program consisted of collecting the noise level data in five locations, including one reference location near the Tenaska power generating facilities, two locations at the station property line, and two locations at nearby residences. The noise measurements were conducted continuously throughout the eight-day period in August 2008.

The weather data were obtained for the nearby airports during the survey. The inclement weather may have affected the measurement results at certain time periods due to rain and wind gusts. The data collected during those periods is presented in the report, but is excluded from the compliance analysis.

The noise data obtained were analyzed and compared with the SUP 00:99 requirements. During the noise monitoring period, the statistical sound levels L_{90} at the two Tenaska property line locations did not exceed the SUP requirement of 60 dBA (with one brief exception that could not be clearly identified). These locations are considered in general compliance with the SUP.

The sound levels L_{90} measured at the two residential locations were in compliance with the SUP requirement of 50 dBA most of the time. This requirement was consistently and significantly exceeded in the residential locations every day during the evening hours between approximately 8 and 11 PM, likely due to the increased insect noise. The SUP requirement was also exceeded by a few decibels on several days in the morning hours; these time periods were likely related to changes in operational profile of the Tenaska power generating facilities.

Additional sound spectrum measurements performed in all the locations indicated a prominent tonal component present in the noise at frequencies of 400 to 500 Hz, clearly generated at the Tenaska facilities. The sound levels of that component were well below the SUP requirements during the measurements. However, such a tonal sound is perceptible and can be annoying to residents due to low ambient noise in the environment.

This report concludes Task 1 of the Scope of Work for the project related to determining compliance of the noise generated by Tenaska Power Station with SUP 00:99. A few limited periods when the noise levels exceeded the SUP requirement at the residential locations were detected. Based on a preliminary analysis, the slightly excessive sound levels during some of those periods were likely attributable to the station operations. Additional detailed noise measurements as provided in Task 2 of the Scope of Work will be necessary to determine specific source(s) of excessive noise generated by the station operations.

APPENDIX A

Hourly A-Weighted Sound Levels at Noise Monitoring Locations

Table 1a. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R1
12-Aug-2008 through 14-Aug-2008

Hour	Tuesday Aug-12-2008						Wednesday Aug-13-2008						Thursday Aug-14-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00							47	49	44	48	47	45	48	51	47	49	48	47
01:00							44	49	41	46	44	43	46	47	44	47	46	45
02:00							42	43	40	42	42	41	42	45	39	43	41	40
03:00							42	45	39	42	41	40	40	43	38	41	40	39
04:00							42	43	39	43	41	40	40	43	38	41	40	39
05:00							40	42	37	41	40	38	39	42	38	40	39	38
06:00							43	49	40	46	42	40	42	49	39	43	41	40
07:00							44	53	40	46	43	41	43	55	41	44	42	41
08:00							46	50	44	47	46	44	45	51	44	45	44	44
09:00							44	49	42	45	44	43	45	52	44	47	45	44
10:00							43	50	41	44	42	42	48	58	46	50	47	46
11:00							45	56	40	49	42	40	47	53	45	48	46	45
12:00							49	56	44	52	48	45	47	54	44	49	47	46
13:00							53	59	49	55	51	50	46	50	45	47	46	45
14:00	41	52	35	44	40	36	47	55	42	49	45	43	45	52	43	46	45	44
15:00	44	57	37	48	40	38	44	54	40	46	43	41	45	48	43	46	44	43
16:00	41	48	38	42	40	39	43	51	40	45	42	40	45	50	43	46	44	44
17:00	41	47	38	42	40	39	45	54	42	48	43	42	46	52	44	47	46	45
18:00	44	51	42	46	44	42	46	53	45	47	46	45	49	53	47	50	49	48
19:00	49	55	48	50	49	48	47	57	45	48	47	46	50	54	49	51	50	49
20:00	52	54	51	53	52	51	52	54	51	53	52	52	57	60	54	58	56	55
21:00	53	54	52	54	53	52	54	55	53	54	54	53	58	59	56	59	58	57
22:00	52	53	50	53	52	51	53	55	52	54	53	53	53	54	52	54	53	53
23:00	49	52	47	51	49	48	51	52	51	52	51	51	52	53	51	53	52	51
LD, dB(A)	48					47	48					47	50					49
LN, dB(A)	51					50	48					47	48					47
DNL, dB(A)							54					53	55					54
Lmean, dB(A)	49					48	48					47	50					49
Hours (Day)	8					8	15					15	15					15
Hours (Night)	2					2	9					9	9					9
Hours (Total)	10					10	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 1b. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R1
15-Aug-2008 through 17-Aug-2008

Hour	Friday Aug-15-2008						Saturday Aug-16-2008						Sunday Aug-17-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00	49	51	48	50	49	49	48	50	47	49	48	48	45	48	43	46	45	44
01:00	47	51	46	48	47	47	46	47	44	46	46	45	41	47	39	43	41	40
02:00	45	47	43	46	45	44	42	44	41	43	42	41	41	47	39	43	41	40
03:00	52	55	50	54	52	51	42	44	41	42	41	41	42	48	39	44	41	40
04:00	52	54	50	53	52	50	41	43	40	42	41	41	40	43	39	42	40	39
05:00	51	54	49	53	51	50	41	43	40	42	41	40	40	42	39	41	40	39
06:00	50	53	48	51	50	49	42	47	40	44	42	41	41	49	38	42	40	39
07:00	52	57	50	53	52	50	48	54	45	50	48	46	48	57	44	49	47	45
08:00	46	54	44	47	45	44	52	56	50	54	52	51	52	55	49	54	52	50
09:00	47	54	45	47	46	46	48	52	45	49	47	46	49	53	47	50	49	48
10:00	49	55	46	50	48	47	48	54	45	50	47	46	49	55	46	51	49	48
11:00	48	53	46	49	48	47	46	54	43	47	45	44	47	58	42	49	45	43
12:00	47	51	45	48	47	46	45	53	42	47	44	43	45	53	40	48	43	41
13:00	47	50	45	48	46	46	45	51	41	46	44	42	42	49	39	44	42	40
14:00	46	50	44	46	46	45	45	50	42	47	45	43	42	48	39	44	42	40
15:00	48	63	43	50	45	44	46	50	42	47	45	43	44	49	40	46	43	42
16:00	49	59	44	50	48	47	46	53	43	48	46	44	45	54	42	47	44	43
17:00	46	50	43	47	45	44	47	51	44	48	47	45	46	55	45	47	46	45
18:00	48	50	47	49	48	47	48	50	46	49	48	47	49	51	48	50	49	48
19:00	48	52	47	49	48	48	50	55	48	51	50	49	50	61	47	51	49	48
20:00	54	55	53	55	54	53	56	63	54	56	55	54	56	58	55	57	56	55
21:00	55	56	54	55	55	54	55	57	54	56	55	54	56	57	55	57	56	55
22:00	54	55	52	54	54	53	52	54	51	53	52	52	54	55	53	55	54	53
23:00	50	52	49	51	50	50	49	52	47	50	48	47	52	53	50	52	52	51
LD, dB(A)	50					49	50					48	50					49
LN, dB(A)	51					50	47					46	47					47
DNL, dB(A)	57					56	54					53	54					53
Lmean, dB(A)	50					49	49					48	49					48
Hours (Day)	15					15	15					15	15					15
Hours (Night)	9					9	9					9	9					9
Hours (Total)	24					24	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 1c. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R1
18-Aug-2008 through 19-Aug-2008

Hour	Monday Aug-18-2008						Tuesday Aug-19-2008											
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90						
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)						
00:00	49	50	47	50	49	48	53	54	52	53	53	52						
01:00	49	50	47	49	49	48	51	52	50	52	51	51						
02:00	42	45	40	43	42	41	51	52	49	51	51	50						
03:00	39	41	38	40	39	38	48	49	47	48	48	47						
04:00	42	46	40	42	41	40	48	50	47	49	48	47						
05:00	42	45	41	43	42	41	45	47	44	46	45	44						
06:00	41	48	40	42	41	40	43	49	40	45	42	41						
07:00	50	57	45	53	49	47	48	52	47	49	48	47						
08:00	43	52	40	45	41	40	46	52	43	48	45	44						
09:00	45	52	42	47	44	43	48	57	44	50	47	45						
10:00	46	59	40	48	44	42	46	54	41	48	44	43						
11:00	43	62	38	43	41	39	44	50	41	46	43	42						
12:00	41	48	37	44	40	38	44	50	40	46	43	42						
13:00	42	54	36	44	40	37												
14:00	42	50	37	45	41	38												
15:00	41	47	37	43	40	38												
16:00	42	51	37	43	40	38												
17:00	41	47	37	43	40	38												
18:00	42	47	40	44	42	40												
19:00	51	63	48	53	50	49												
20:00	56	61	55	57	56	55												
21:00	56	57	56	57	56	56												
22:00	56	56	55	56	56	55												
23:00	54	55	54	55	54	54												
LD, dB(A)	49					48	46					44						
LN, dB(A)	50					49	49					49						
DNL, dB(A)	56					55												
Lmean, dB(A)	49					48	48					47						
Hours (Day)	15					15	6					6						
Hours (Night)	9					9	7					7						
Hours (Total)	24					24	13					13						

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 2a. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R2
12-Aug-2008 through 14-Aug-2008

Hour	Tuesday Aug-12-2008						Wednesday Aug-13-2008						Thursday Aug-14-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00							40	41	37	41	40	38	46	49	44	47	46	45
01:00							38	41	34	40	38	36	45	47	43	46	45	43
02:00							38	41	35	40	38	36	44	46	41	45	44	42
03:00							37	40	34	39	37	35	44	46	41	45	44	42
04:00							39	48	35	40	39	37	44	46	41	45	44	42
05:00							40	42	37	41	40	39	45	48	42	46	44	43
06:00							43	54	38	46	41	39	45	54	41	48	43	42
07:00							45	59	38	47	42	39	46	59	42	47	44	43
08:00							46	54	44	47	46	44	47	61	45	48	46	45
09:00							45	54	42	46	44	43	49	63	45	50	46	45
10:00							46	57	42	49	45	43	46	55	44	48	46	45
11:00							45	53	42	48	45	43	45	54	42	47	44	43
12:00							46	59	41	48	46	42	45	55	40	47	43	41
13:00							48	54	44	49	47	45	43	49	40	44	42	41
14:00							48	64	40	48	43	41	45	61	40	46	43	41
15:00							50	65	41	52	46	43	43	51	40	45	43	41
16:00	41	46	37	43	40	39	45	56	41	47	44	42	44	49	41	45	43	42
17:00	41	53	38	43	40	39	45	52	42	48	44	43	47	55	42	49	46	43
18:00	43	48	39	46	42	40	47	54	43	48	46	44	49	57	44	51	47	45
19:00	44	48	41	45	43	42	45	48	42	47	45	43	49	52	45	50	48	47
20:00	53	55	50	55	53	51	52	54	50	53	52	51	53	58	51	54	53	52
21:00	54	56	53	55	54	54	55	57	53	56	55	54	54	58	52	55	54	53
22:00	43	45	42	44	43	42	50	53	48	52	50	49	50	52	47	51	50	48
23:00	41	45	39	42	41	40	55	58	50	57	55	53	49	51	47	50	49	48
LD, dB(A)	50					48	49					46	48					46
LN, dB(A)	42					41	47					45	46					45
DNL, dB(A)							54					52	53					51
Lmean, dB(A)	49					47	48					46	48					46
Hours (Day)	6					6	15					15	15					15
Hours (Night)	2					2	9					9	9					9
Hours (Total)	8					8	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 2b. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R2
15-Aug-2008 through 17-Aug-2008

Hour	Friday Aug-15-2008						Saturday Aug-16-2008						Sunday Aug-17-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00	46	47	43	47	46	45	46	50	43	48	46	44	39	41	37	40	39	38
01:00	44	46	40	45	44	42	41	46	38	42	40	39	37	41	35	38	37	35
02:00	40	46	38	42	40	38	40	44	36	42	39	37	38	43	36	39	38	36
03:00	45	48	42	47	45	43	46	48	41	47	46	44	36	43	33	38	35	34
04:00	49	51	48	51	49	48	46	49	41	47	46	44	39	41	37	40	38	37
05:00	47	48	45	48	47	46	44	46	40	45	44	43	40	43	38	42	40	39
06:00	46	56	43	48	45	44	43	49	39	45	43	41	45	55	38	49	41	39
07:00	44	53	40	46	42	40	43	53	39	45	42	40	44	49	42	45	44	43
08:00	46	54	44	48	46	44	48	51	46	49	48	46	53	56	50	54	52	51
09:00	47	56	45	49	46	45	47	55	45	50	47	45	47	49	46	48	47	47
10:00	47	57	44	50	46	44	45	56	43	47	45	43	47	53	45	48	46	45
11:00	45	55	42	47	45	43	44	54	41	45	43	42	44	53	40	46	43	41
12:00	46	53	43	47	45	44	43	49	38	46	42	40	45	56	39	48	42	40
13:00	46	56	42	48	45	43	45	57	39	47	42	40	44	57	39	46	42	40
14:00	47	57	44	49	46	44	42	50	38	44	41	39	42	56	38	44	41	39
15:00	45	55	41	46	43	42	43	57	38	46	41	39	44	56	38	46	41	39
16:00	43	49	41	45	43	41	43	53	39	45	41	40	44	59	38	47	41	39
17:00	42	49	38	45	41	39	52	73	38	51	40	39	45	55	42	46	44	43
18:00	45	47	42	46	45	43	44	48	42	45	43	42	46	54	44	47	46	45
19:00	43	47	41	44	42	41	48	61	44	49	46	45	46	48	45	47	46	45
20:00	53	56	50	55	53	51	55	57	51	56	55	53	55	58	52	57	55	54
21:00	54	56	52	55	54	52	53	54	50	54	53	51	55	56	53	55	54	54
22:00	48	52	45	49	47	45	45	48	43	46	45	44	49	50	47	49	48	47
23:00	48	52	44	49	48	46	41	43	39	42	41	40	50	51	48	51	50	49
LD, dB(A)	48					46	48					46	49					47
LN, dB(A)	46					45	44					42	44					43
DNL, dB(A)	53					51	51					49	52					50
Lmean, dB(A)	47					45	47					45	48					46
Hours (Day)	15					15	15					15	15					15
Hours (Night)	9					9	9					9	9					9
Hours (Total)	24					24	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 2c. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location R2
18-Aug-2008 through 19-Aug-2008

Hour	Monday Aug-18-2008						Tuesday Aug-19-2008											
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90						
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)						
00:00	44	46	43	45	44	43	49	51	47	50	49	47						
01:00	42	43	40	42	42	41	49	52	46	50	49	47						
02:00	41	42	40	42	41	40	48	51	46	49	48	47						
03:00	41	43	39	42	41	40	48	51	45	49	48	46						
04:00	47	49	44	48	47	45	46	47	44	47	46	45						
05:00	50	53	48	52	50	49	47	50	44	49	46	44						
06:00	50	52	48	51	50	48	49	58	44	51	48	45						
07:00	51	54	49	52	51	50	45	51	42	48	44	43						
08:00	48	54	46	50	48	46	49	59	46	51	47	46						
09:00	48	53	47	49	48	47	46	55	44	48	46	45						
10:00	48	54	45	50	48	46	46	58	43	48	45	44						
11:00	45	51	43	47	45	44	44	55	39	45	42	40						
12:00	47	58	42	49	46	44	43	53	39	45	42	40						
13:00	45	53	41	48	44	42												
14:00	44	51	40	47	44	42												
15:00	47	55	43	49	46	44												
16:00	47	54	43	49	46	44												
17:00	48	61	43	49	46	44												
18:00	48	61	42	50	44	43												
19:00	50	57	43	52	49	44												
20:00	58	60	54	60	58	56												
21:00	54	56	52	55	54	53												
22:00	52	55	50	53	52	50												
23:00	49	52	48	51	49	48												
LD, dB(A)	50					48	46					44						
LN, dB(A)	48					46	48					46						
DNL, dB(A)	55					53												
Lmean, dB(A)	50					48	47					45						
Hours (Day)	15					15	6					6						
Hours (Night)	9					9	7					7						
Hours (Total)	24					24	13					13						

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 3a. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P1
12-Aug-2008 through 14-Aug-2008

Hour	Tuesday Aug-12-2008						Wednesday Aug-13-2008						Thursday Aug-14-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00							47	49	44	48	47	46	48	50	46	49	48	47
01:00							42	45	37	44	42	40	45	47	42	46	45	44
02:00							39	43	36	41	39	37	40	42	38	41	40	39
03:00							37	39	35	38	37	36	37	41	35	38	37	36
04:00							36	40	34	38	36	34	36	39	35	37	36	35
05:00							33	40	29	35	32	31	39	43	37	41	38	37
06:00							38	41	36	39	38	36	40	43	38	41	40	39
07:00							37	40	35	39	37	36	42	45	40	44	42	41
08:00							46	47	44	47	46	45	50	53	48	51	50	48
09:00							50	51	47	51	50	49	53	56	49	54	53	51
10:00							48	52	45	49	48	47	51	55	47	53	50	49
11:00							48	55	44	50	47	45	47	52	43	50	47	44
12:00							53	57	51	55	53	52	43	48	39	45	42	40
13:00							52	56	49	54	52	50	45	50	43	47	45	44
14:00	44	56	38	47	42	40	49	53	46	50	49	47	47	55	43	50	46	44
15:00	48	59	41	49	45	43	45	50	42	47	45	43	43	47	39	45	43	40
16:00	45	50	40	47	44	42	45	49	41	46	44	42	45	50	42	47	45	43
17:00	45	49	42	46	45	43	46	60	40	46	43	41	48	52	45	50	48	46
18:00	46	49	43	47	46	44	45	59	40	45	43	41	50	54	47	51	49	48
19:00	45	48	43	46	45	44	43	46	40	44	43	42	48	51	46	49	48	47
20:00	50	53	48	51	49	48	51	54	49	52	51	50	51	56	49	52	51	50
21:00	53	54	51	53	53	52	54	56	52	55	54	53	54	58	53	55	54	53
22:00	51	52	49	52	51	50	52	53	51	53	52	51	53	54	51	54	53	52
23:00	49	51	47	50	49	48	51	52	50	52	51	50	50	52	49	51	50	50
LD, dB(A)	48					46	49					48	49					48
LN, dB(A)	50					49	46					45	47					46
DNL, dB(A)							53					52	54					53
Lmean, dB(A)	48					47	48					47	49					47
Hours (Day)	8					8	15					15	15					15
Hours (Night)	2					2	9					9	9					9
Hours (Total)	10					10	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 3b. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P1
15-Aug-2008 through 17-Aug-2008

Hour	Friday Aug-15-2008						Saturday Aug-16-2008						Sunday Aug-17-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00	47	49	45	48	47	46	46	48	44	47	46	45	43	47	40	45	43	42
01:00	45	47	43	46	45	44	42	46	40	44	42	41	39	42	37	40	39	38
02:00	43	44	41	44	43	42	40	42	37	41	40	38	43	48	39	46	40	39
03:00	49	50	47	50	48	48	41	44	38	42	41	39	38	41	36	39	37	36
04:00	52	54	50	53	52	51	39	41	36	40	39	37	41	42	39	42	41	40
05:00	51	53	50	52	51	50	37	41	35	39	37	35	41	44	40	43	41	40
06:00	48	50	46	49	48	46	37	45	34	38	36	35	41	43	39	42	40	39
07:00	48	50	46	49	48	46	45	49	43	46	45	44	46	49	45	47	46	45
08:00	49	52	47	50	48	47	50	52	49	51	50	49	51	55	50	52	51	50
09:00	50	53	49	52	50	49	51	55	49	53	51	50	52	54	51	53	52	51
10:00	51	55	47	53	50	48	50	55	47	52	50	48	51	55	47	52	50	48
11:00	49	52	47	50	49	47	47	53	43	50	46	44	48	54	41	51	46	43
12:00	51	54	49	52	51	50	45	49	40	47	44	42	40	48	35	44	39	37
13:00	50	54	47	51	49	48	44	50	40	47	44	42	42	48	36	45	41	37
14:00	51	55	48	52	51	49	45	51	40	48	44	42	44	52	39	47	43	41
15:00	47	52	45	49	47	45	48	51	43	49	47	45	45	52	40	48	44	42
16:00	47	50	45	48	47	45	47	52	43	49	47	45	43	51	39	46	42	40
17:00	47	51	43	49	46	44	48	51	44	49	48	46	45	55	42	47	44	43
18:00	45	48	43	46	45	44	47	50	45	48	47	46	43	48	41	44	43	42
19:00	45	48	42	46	45	43	48	61	42	49	45	43	44	52	39	47	42	40
20:00	51	53	49	52	51	50	50	53	48	51	50	49	53	56	50	54	52	51
21:00	53	54	51	53	53	52	52	53	50	53	52	51	53	54	52	54	53	52
22:00	51	52	49	51	51	50	50	52	49	51	50	49	52	53	50	52	52	51
23:00	49	51	47	50	49	48	46	48	43	47	45	44	50	51	48	50	50	49
LD, dB(A)	49					48	49					47	49					47
LN, dB(A)	49					48	44					43	46					45
DNL, dB(A)	56					54	52					50	53					52
Lmean, dB(A)	49					48	47					46	48					46
Hours (Day)	15					15	15					15	15					15
Hours (Night)	9					9	9					9	9					9
Hours (Total)	24					24	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 3c. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P1
18-Aug-2008 through 19-Aug-2008

Hour	Monday Aug-18-2008						Tuesday Aug-19-2008											
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90						
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)						
00:00	48	49	46	49	48	47	53	54	51	53	53	52						
01:00	44	46	42	45	44	43	51	52	50	52	51	50						
02:00	39	41	38	40	39	39	50	51	48	51	50	49						
03:00	36	38	35	37	36	35	50	52	49	51	50	49						
04:00	43	45	41	44	43	41	49	51	47	51	49	48						
05:00	50	53	48	52	50	48	50	52	48	51	50	49						
06:00	49	51	47	50	49	48	49	52	46	50	48	47						
07:00	50	54	48	51	50	49	50	54	47	52	50	48						
08:00	48	51	47	50	48	47	52	56	50	53	52	50						
09:00	50	55	48	52	50	49	51	56	48	52	50	49						
10:00	49	58	44	52	49	45	48	55	42	51	47	44						
11:00	46	52	41	48	45	42	45	54	39	47	43	41						
12:00	50	59	39	54	47	41	43	52	37	46	41	38						
13:00	42	51	37	44	42	39												
14:00	43	55	37	45	41	39												
15:00	43	48	37	45	42	39												
16:00	44	49	39	46	43	41												
17:00	46	59	38	48	42	40												
18:00	46	59	39	47	43	41												
19:00	51	57	45	54	50	47												
20:00	53	59	51	55	53	52												
21:00	56	57	54	56	55	55												
22:00	56	57	54	57	56	55												
23:00	55	56	53	55	55	54												
LD, dB(A)	50					47	49					47						
LN, dB(A)	50					49	50					49						
DNL, dB(A)	57					56												
Lmean, dB(A)	50					48	50					48						
Hours (Day)	15					15	6					6						
Hours (Night)	9					9	7					7						
Hours (Total)	24					24	13					13						

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 4a. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P2
12-Aug-2008 through 14-Aug-2008

Hour	Tuesday Aug-12-2008						Wednesday Aug-13-2008						Thursday Aug-14-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00							45	47	43	46	45	43	50	51	48	51	50	48
01:00							41	44	39	42	41	39	49	50	47	50	48	47
02:00							39	41	38	40	39	38	49	50	47	49	48	47
03:00							41	46	38	42	40	38	48	50	47	49	48	47
04:00							41	45	39	42	41	39	48	49	46	49	48	46
05:00							39	43	37	40	39	37	48	53	46	49	48	47
06:00							38	44	36	39	37	36	46	49	44	47	46	44
07:00							43	51	42	44	43	42	48	55	46	49	48	46
08:00							48	51	47	50	48	47	51	53	50	52	51	50
09:00							48	54	46	49	47	46	52	55	51	53	52	51
10:00							49	53	47	51	49	48	52	56	49	54	52	50
11:00							51	58	47	52	50	48	52	56	48	54	51	49
12:00							55	58	52	57	55	52	52	56	47	54	51	48
13:00							56	60	54	58	55	54	54	63	49	57	53	50
14:00							51	55	49	53	51	49	49	57	45	51	48	46
15:00	48	58	42	51	46	43	51	54	48	52	51	49	49	53	47	51	49	47
16:00	48	52	44	50	47	45	50	54	47	52	50	48	49	52	46	50	49	47
17:00	49	52	46	50	49	47	50	56	47	52	49	47	49	53	46	50	48	46
18:00	49	52	47	50	49	47	51	55	48	52	50	49	50	53	47	52	50	49
19:00	49	51	47	50	49	48	51	56	48	53	51	49	48	51	46	49	48	46
20:00	54	56	53	55	54	53	55	57	53	56	55	53	51	62	48	53	50	49
21:00	54	55	53	55	54	53	57	59	55	58	57	55	52	54	51	53	52	51
22:00	51	52	49	51	51	49	54	57	52	55	54	53	52	58	50	53	52	50
23:00	47	50	45	49	47	46	51	53	49	52	51	50	50	51	48	50	50	49
LD, dB(A)	51					49	52					50	51					49
LN, dB(A)	49					48	47					46	49					48
DNL, dB(A)							55					53	56					54
Lmean, dB(A)	51					49	51					49	50					48
Hours (Day)	7					7	15					15	15					15
Hours (Night)	2					2	9					9	9					9
Hours (Total)	9					9	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 4b. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P2
 15-Aug-2008 through 17-Aug-2008

Hour	Friday Aug-15-2008						Saturday Aug-16-2008						Sunday Aug-17-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00	49	51	46	50	49	47	46	48	43	47	46	44	43	46	41	45	43	41
01:00	41	45	40	42	41	40	44	47	42	45	44	42	43	45	40	44	43	41
02:00	44	47	43	46	44	43	41	49	39	43	41	39	45	48	42	47	45	43
03:00	51	56	47	52	50	47	41	45	39	42	40	39	45	47	43	46	45	43
04:00	57	59	54	58	57	55	41	44	39	42	41	39	41	42	39	42	41	39
05:00	51	52	50	52	51	50	40	44	38	41	40	38	41	45	40	42	41	40
06:00	52	53	50	53	51	50	40	48	37	43	39	38	43	45	41	44	42	41
07:00	51	52	50	51	51	50	45	56	42	46	44	42	48	63	45	50	46	45
08:00	51	62	48	52	49	48	50	54	48	51	50	48	51	54	49	52	51	49
09:00	52	56	50	53	52	50	51	54	50	52	51	50	50	55	49	52	50	49
10:00	51	54	49	53	51	50	52	56	50	54	52	50	50	54	48	51	50	49
11:00	51	56	50	52	51	50	47	51	44	49	47	45	47	52	43	48	46	44
12:00	52	54	51	53	52	51	45	50	40	47	45	41	44	52	40	46	43	41
13:00	51	54	50	52	51	50	42	48	38	44	41	39	46	50	43	48	46	44
14:00	50	51	48	51	50	49	44	51	39	46	43	40	48	53	45	49	47	46
15:00	46	50	44	47	45	44	46	51	43	48	46	43	46	51	43	47	45	43
16:00	45	49	43	46	45	44	44	49	39	46	43	41	44	53	40	46	42	40
17:00	47	52	42	49	46	43	45	49	42	47	45	43	46	52	44	47	45	44
18:00	47	51	45	48	47	46	50	51	48	51	50	49	48	57	46	49	48	47
19:00	44	53	41	45	43	41	51	66	43	49	45	44	49	58	47	51	48	47
20:00	49	51	47	49	49	47	51	55	50	52	51	50	55	58	54	56	55	54
21:00	51	53	50	52	51	50	54	55	53	55	54	53	55	58	54	56	55	54
22:00	51	55	48	53	50	49	54	57	52	55	54	52	55	64	53	56	55	53
23:00	47	49	45	48	47	46	47	50	43	48	46	44	53	55	52	55	53	52
LD, dB(A)	50					48	49					47	50					48
LN, dB(A)	51					49	47					45	49					47
DNL, dB(A)	57					56	53					52	55					54
Lmean, dB(A)	50					49	48					47	50					48
Hours (Day)	15					15	15					15	15					15
Hours (Night)	9					9	9					9	9					9
Hours (Total)	24					24	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 4c. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P2
 18-Aug-2008 through 19-Aug-2008

Hour	Monday Aug-18-2008						Tuesday Aug-19-2008											
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90						
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)						
00:00	50	52	48	51	50	49	54	56	53	55	54	53						
01:00	47	48	45	48	47	46	56	59	54	58	56	55						
02:00	47	48	45	48	47	46	55	58	53	57	55	54						
03:00	45	47	44	46	45	44	54	56	52	55	54	52						
04:00	54	60	51	55	53	52	54	56	52	55	54	52						
05:00	55	57	54	56	55	54	56	58	53	57	55	54						
06:00	53	55	51	54	53	52	53	55	51	54	53	51						
07:00	48	51	47	49	48	47	53	57	51	54	53	51						
08:00	51	53	49	51	50	50	52	56	49	54	52	50						
09:00	52	55	50	53	52	51	51	56	49	52	50	49						
10:00	52	55	50	54	52	50	47	54	43	49	46	44						
11:00	50	54	48	52	50	48	42	51	36	45	41	37						
12:00	49	53	46	51	49	47	41	50	36	43	40	37						
13:00	50	53	46	51	49	47	43	53	38	45	41	40						
14:00	50	54	46	52	49	47	52	65	50	53	52	50						
15:00	50	53	47	51	49	47												
16:00	51	56	48	53	51	49												
17:00	51	55	48	53	51	49												
18:00	51	55	48	53	51	49												
19:00	53	58	50	55	52	50												
20:00	56	59	54	57	56	55												
21:00	56	57	54	56	56	55												
22:00	55	57	53	56	55	54												
23:00	55	57	53	56	55	54												
LD, dB(A)	52					50	50					48						
LN, dB(A)	52					51	55					53						
DNL, dB(A)	59					57												
Lmean, dB(A)	52					51	53					51						
Hours (Day)	15					15	8					8						
Hours (Night)	9					9	7					7						
Hours (Total)	24					24	15					15						

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 5a. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P3
12-Aug-2008 through 14-Aug-2008

Hour	Tuesday Aug-12-2008						Wednesday Aug-13-2008						Thursday Aug-14-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00							55	56	55	56	55	55	62	62	61	62	62	61
01:00							55	55	54	55	55	54	62	62	61	62	62	61
02:00							54	55	53	54	54	53	62	62	61	62	62	61
03:00							54	54	53	54	54	53	62	62	61	62	62	61
04:00							54	55	54	55	54	54	62	63	61	63	62	61
05:00							54	55	54	55	54	54	62	64	61	63	62	62
06:00							54	55	54	55	54	54	62	62	61	62	62	61
07:00							62	68	61	63	62	61	63	69	62	64	63	62
08:00							70	71	68	71	70	68	68	69	66	69	68	67
09:00							65	66	64	65	64	64	66	68	65	66	66	65
10:00							64	65	63	65	64	63	65	66	64	66	65	64
11:00							65	67	63	65	65	64	65	67	64	66	65	65
12:00							65	66	64	66	65	64	66	69	64	68	66	65
13:00							66	66	65	66	66	65	66	67	64	67	66	65
14:00							65	67	64	66	65	64	65	66	64	66	65	64
15:00	59	62	58	60	59	58	65	66	64	65	65	64	68	70	65	69	68	66
16:00	65	67	64	66	65	64	64	65	63	65	64	63	66	67	65	67	66	65
17:00	65	67	64	66	65	64	64	66	63	65	64	63	65	66	64	66	65	64
18:00	65	66	64	66	65	64	64	66	63	65	64	64	65	66	64	66	65	64
19:00	64	66	64	65	64	64	64	65	63	65	64	64	64	65	64	65	64	64
20:00	65	66	65	66	65	65	66	67	65	67	66	65	64	65	64	65	64	64
21:00	67	67	66	67	67	66	66	67	65	67	66	66	65	66	65	66	65	65
22:00	66	68	65	67	66	65	65	68	64	66	65	64	63	68	62	64	63	62
23:00	62	67	60	62	61	60	64	67	61	65	63	62	62	62	61	62	62	61
LD, dB(A)	65					64	65					64	66					65
LN, dB(A)	64					64	59					58	62					61
DNL, dB(A)							67					66	69					68
Lmean, dB(A)	65					64	64					63	65					64
Hours (Day)	7					7	15					15	15					15
Hours (Night)	2					2	9					9	9					9
Hours (Total)	9					9	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 5b. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P3
15-Aug-2008 through 17-Aug-2008

Hour	Friday Aug-15-2008						Saturday Aug-16-2008						Sunday Aug-17-2008					
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
00:00	62	62	61	62	62	61	55	57	55	56	55	55	56	57	56	57	56	56
01:00	62	62	61	62	61	61	55	56	54	56	55	55	56	57	55	57	56	56
02:00	62	62	61	62	62	61	54	55	54	55	54	54	56	57	55	57	56	55
03:00	66	70	64	67	66	64	54	55	53	54	54	53	55	56	55	56	55	55
04:00	69	70	67	70	69	67	54	55	54	55	54	54	55	56	54	56	55	54
05:00	65	66	64	66	65	64	54	55	53	55	54	53	54	55	54	55	54	54
06:00	65	66	64	65	65	64	54	55	53	54	54	53	54	55	53	54	54	53
07:00	65	65	64	65	65	64	62	66	60	62	62	61	63	71	61	64	62	62
08:00	64	65	64	65	64	64	70	72	68	71	70	68	70	72	68	71	70	68
09:00	64	64	63	64	64	63	65	67	64	66	65	64	65	66	64	65	65	64
10:00	63	64	62	64	63	63	64	65	62	64	64	63	63	64	63	64	63	63
11:00	64	64	63	64	64	63	63	64	62	64	63	62	63	64	62	64	63	62
12:00	65	66	64	66	65	65	64	65	63	65	64	63	63	64	62	64	63	62
13:00	65	66	64	66	65	64	65	66	63	65	65	64	65	66	63	65	65	64
14:00	65	66	65	66	65	65	64	66	63	65	64	64	65	66	64	66	65	64
15:00	65	66	64	66	65	64	65	66	64	66	65	64	65	66	64	66	65	64
16:00	64	65	64	65	64	64	65	66	63	66	65	64	64	66	63	65	65	64
17:00	64	65	63	65	64	63	65	66	64	66	65	64	65	66	64	65	65	64
18:00	64	64	63	64	64	63	66	67	64	66	66	65	65	65	64	65	65	64
19:00	64	64	63	64	64	63	64	67	63	65	64	64	64	65	64	65	64	64
20:00	64	65	63	65	64	64	66	67	66	67	66	66	66	66	65	66	66	65
21:00	64	65	64	65	64	64	67	67	66	67	66	66	66	67	66	67	66	66
22:00	65	67	64	65	65	64	65	69	64	66	65	64	65	66	64	65	65	64
23:00	58	64	57	58	58	57	57	57	56	57	57	56	65	66	64	65	65	64
LD, dB(A)	64					64	65					64	65					64
LN, dB(A)	65					64	58					57	60					59
DNL, dB(A)	71					70	66					66	67					67
Lmean, dB(A)	64					64	64					63	64					63
Hours (Day)	15					15	15					15	15					15
Hours (Night)	9					9	9					9	9					9
Hours (Total)	24					24	24					24	24					24

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels

Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels

Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels

L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels

L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels

LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)

LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)

DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels

Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels

Table 5c. Tenaska Power Station
Hourly A-Weighted Sound Levels at Noise Monitoring Location P3
 18-Aug-2008 through 19-Aug-2008

Hour	Monday Aug-18-2008						Tuesday Aug-19-2008											
	Leq	Lmax	Lmin	L10	L50	L90	Leq	Lmax	Lmin	L10	L50	L90						
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)						
00:00	60	64	58	61	60	59	67	68	66	67	67	66						
01:00	56	57	56	57	56	56	67	67	66	67	66	66						
02:00	56	57	55	57	56	55	67	68	66	68	67	66						
03:00	56	57	55	56	56	55	67	68	66	68	67	66						
04:00	67	71	65	69	67	66	66	69	66	67	66	66						
05:00	69	70	67	70	69	68	67	68	66	68	67	67						
06:00	65	66	65	66	65	65	66	66	65	66	66	65						
07:00	65	66	65	66	65	65	65	66	65	66	65	65						
08:00	65	66	64	66	65	65	65	66	64	65	65	64						
09:00	65	66	64	65	65	64	63	64	62	64	63	63						
10:00	65	67	64	66	65	65	63	64	62	64	63	62						
11:00	66	67	65	67	66	65	64	65	62	64	64	63						
12:00	66	67	65	67	66	65	64	66	63	65	64	63						
13:00	66	68	65	67	66	65	67	84	65	68	67	66						
14:00	66	67	65	67	66	65												
15:00	66	68	65	67	66	65												
16:00	66	68	65	67	66	65												
17:00	66	67	65	67	66	65												
18:00	66	67	65	67	66	65												
19:00	66	68	65	67	66	66												
20:00	70	72	67	71	70	68												
21:00	67	69	65	68	67	66												
22:00	65	66	64	66	65	64												
23:00	66	68	65	67	66	66												
LD, dB(A)	66					65	65					64						
LN, dB(A)	65					64	67					66						
DNL, dB(A)	71					70												
Lmean, dB(A)	66					65	66					65						
Hours (Day)	15					15	7					7						
Hours (Night)	9					9	7					7						
Hours (Total)	24					24	14					14						

Leq, dB(A) = Hourly Average A-weighted Sound Level, in decibels
 Lmax, dB(A) = Hourly Maximum A-weighted Sound Level, in decibels
 Lmin, dB(A) = Hourly Minimum A-weighted Sound Level, in decibels
 L10, dB(A) = Hourly A-weighted Sound Level Exceeded 10 Percent of the Time, in decibels
 L50, dB(A) = Hourly A-weighted Sound Level Exceeded 50 Percent of the Time, in decibels

L90, dB(A) = Hourly A-weighted Sound Level Exceeded 90 Percent of the Time, in decibels
 LD, dB(A) = Daytime Average A-weighted Sound Level, in decibels (07:00-22:00)
 LN, dB(A) = Nighttime Average A-weighted Sound Level, in decibels (00:00-07:00 and 22:00-24:00)
 DNL, dB(A) = Day-Night Average A-weighted Sound Level, in decibels
 Lmean, dB(A) = Daily (24-hour) Average A-weighted Sound Level, in decibels