

March 31, 2016

Via Hand Delivery/Electronic Mail

Todd Anthony Bianco, EFSB Coordinator
RI Energy Facilities Siting Board
89 Jefferson Blvd.
Warwick, RI 02888

Re: Invenergy Thermal Development LLC's Application to Construct The Clear River
Energy Center In Burrillville, Rhode Island
Docket No.: SB-2015-06

Dear Mr. Bianco:

On behalf of Invenergy Thermal Development LLC and the Clean River Energy Center Project, I enclose an original and (10) copies for filing with the Board the following in the above docket:

1. Invenergy Thermal Development LLC's Responses to the Town of Burrillville's First Set of Data Requests.

Please let me know if you have any questions.

Very truly yours,


ALAN M. SHOER
ashoer@apslaw.com

Enclosures

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: Application of
Invenergy Thermal Development LLC's
Proposal for Clear River Energy Center

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**INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO
THE TOWN OF BURRILLVILLE'S FIRST SET OF DATA REQUESTS**

1.1: Please explain in detail whether the proposed facility will fully comply with the Town's noise ordinance.

RESPONSE:

As explained in Section 6.9 of our Energy Facility Siting Board Application, noise produced during normal operation of the CREC facility will comply with the A weighted limits in the Town of Burrillville noise Code of Ordinances. CREC must also conform to levels approved by the Rhode Island Energy Facilities Siting Board, ("EFSB"). The Project performed an evaluation of the Town of Burrillville's Code of Ordinances, as it relates to the noise performance standard in an effort to arrive at a noise level design goal that was both respectful of the Code's intent to protect the community from excessive noise, yet commercially feasible to achieve and consistent with previous EFSB approvals. The Town of Burrillville noise Code of Ordinances, which generally limits both broadband (A-weighted) to an equivalent level of 43 dBA and specific octave-band Facility noise levels at nearby residences, (see Table 1 below). The Town of Burrillville's Code, however, also states that is not applicable in instances where "[t]he facility generating the noise has been granted a permit or license by a federal and/or state agency and the authorization to operate within set noise limits". The CREC Project proposes to comply with the same stringent noise limit imposed by the EFSB on Burrillville's Ocean State Power Project (and other EFSB approved projects), namely the broadband A – weighted limit of 43 dBA at the closest residence.

The Burrillville noise limits, specifically in the low-frequency octave-bands (31.5 Hz, 63 Hz, and 125 Hz), are among the most stringent that we have seen in the United States. Compared to octave band noise limits used in other US jurisdictions (*see Table 1*), the Burrillville Ordinance is significantly more restrictive. This is particularly relevant since low-frequency emissions are generally more difficult to mitigate than are high-frequency noise emissions. Invenergy Thermal Development, LLC ("Invenergy") examined the design approaches needed to comply with the Town's octave band ordinance. Achieving the broadband portion of the code (43 dBA) is feasible for normal operation modes, by using extensive controls as shown on Table 9, including placing the combustion turbines within buildings. Achieving the octave band limits was not feasible for all octave bands during normal or transient operating modes. Attaining the unusually restrictive octave-band limits was found to require extraordinary mitigation measures that were determined to be technically infeasible. Invenergy performed an evaluation of the noise produced during transient operating modes and the type of controls that would be needed to meet the broad band requirements. The Transient Noise Level Evaluation Report is included as **Exhibit A**. For normal operations, the expected octave band noise is shown on Table 1, which shows the Clear River Energy Center ("CREC" or the "Project") expected octave band and A weighted noise levels.

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Table 1: Octave-Band Noise Level Limits by Other Regulating Bodies (dB)										
Frequency	Octave-Band Center Frequency (Hz)									A-Weight
	31.5	63	125	250	500	1000	2000	4000	8000	
Appleton, WI¹	74	73	68	63	57	51	46	42	39	60
Fairfax County, VA²	70	69	64	59	53	47	42	38	35	55
Illinois State³	69	67	62	54	47	41	36	32	32	51
New Jersey State⁴	86	71	61	53	48	45	42	40	38	50
Portland, OR⁵	68	65	61	55	52	49	46	43	40	55
Seminole County, FL⁶	68	67	66	59	52	46	37	26	17	55
CREC	60.1	61.8	54.4	43.7	37.6	35.1	27.7	12.7	0	43
Burrillville, RI	53	52	48	44	40	37	33	29	28	43

1 - Appleton Municipal Code, Chapter 12, Article IV; 2001. Limit for industrial emitter onto residential zone between 10 p.m. and 7 a.m.

2 - Fairfax County Code, Chapter 108, Article 4; 1976. Limit for any noise source at residential receiver.

3 - Illinois Administrative Code, Title 35, Part 901; 2007. Limit for industrial (Class C) emitter to residential (Class A) receiver between 10 p.m. and 7 a.m.

4 - New Jersey Administrative Code, Title 7, Chapter 29; 2012. Limit for industrial emitter to residential receiver between 10 p.m. and 7 a.m.

5 - Portland City Code, Title 18; 2010. Limit for continuous industrial emitter to residential receiver between 10 p.m. and 7 a.m. Octave bands are enforced at the discretion of the Noise Control Officer.

6 - Seminole County Land Development Code, Chapter 30, Part 68; 2014. Limit at industrial property lines abutting residential districts.

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As shown on Table 1, which is a summary of the data included in Appendix E, the CREC expected octave band limits are below the limits stated in the Town Code for all but three of the levels corresponding to the lower octave bands. The octave band noise limits listed for other US jurisdictions (*Table 1*), where found based on a search of similar ordinances that included octave band limits. The list is not presented as a complete list but rather as a representative list of ordinances that have such stipulations. The noise expected for transient modes of operation are discussed in the response to question 1.5.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

DATE: March 31, 2016

EXHIBIT A

2016

Transient Operation Noise Level Evaluation for the Clear River Energy Center



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Report No. 1956

March 2016

*Transient Operation Noise Level Evaluation for the
Clear River Energy Center*

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N1	Transient Operation Noise Level Modeling Calculations and Results
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Abbreviations

ACC	Air Cooled Condenser
ACHE	Air Cooled Heat Exchanger
ANSI	American National Standards Institute
Aux	Auxiliary
BCS	Burrillville Compressor Station
CREC	Clear River Energy Center
CT	Combustion Turbine
dB	Decibels
dBA	Decibels, A-Weighted
EI	Edison Electric Institute
EFSB	Energy Facility Siting Board
EPA	U.S. Environmental Protection Agency
EPC	Engineering, Procurement and Construction
Facility	Clear River Energy Center
FD	Forced Draft
GE	General Electric
GSU	Generator Step-Up
HRSG	Heat Recovery Steam Generator
HVAC	Heating, Ventilation and Air Conditioning
Hz	Hertz
Invenergy	Invenergy, LLC
ISO	International Organization for Standardization
L _{AEQ}	Equivalent Energy Level, A-Weighted
L _p	Sound Pressure Level
L _w	Sound Power Level
mbar	Millibars
MTA	Michael Theriault Acoustics, Inc.
MW	Megawatt
NED	National Elevation Dataset
NSA	Noise Sensitive Area
PWL	Sound Power Level
SCR	Selective Catalytic Reduction
SPL	Sound Pressure Level
STC	Sound Transmission Class
STG	Steam Turbine Generator
USGS	United States Geological Survey

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1.0 Executive Summary

Invenergy, LLC (Invenergy) is proposing to construct and operate the Clear River Energy Center (CREC), a nominal 900 to 1,000-megawatt combined-cycle, natural gas-fired electrical power generation facility (Facility) designed for baseload operation and sited in the Town of Burrillville, Providence County, Rhode Island.

Noise generated by the CREC during ‘transient’ operations, which include startup (rapid response hot/cold startup), typical shutdown, emergency steam release, and emergency shutdown have the potential to impact residences located near the Facility. This report describes the evaluation of community noise levels conducted for these operations and supplements the evaluation of noise from baseload operations that was described in MTA Report No. 1955 *Noise Level Evaluation for the Clear River Energy Center (October 2015)*. The latter report provides general information on noise, and details regarding applicable noise standards, existing ambient noise levels, construction noise, noise level prediction methodology, and noise from baseload CREC operations. Note that noise levels during fuel oil operation were also analyzed, but found to be identical to those during gas operations and are therefore not discussed further herein.

Noise produced during operation of the CREC must conform to levels approved by the Rhode Island Energy Facilities Siting Board (EFSB). The Town of Burrillville also has a performance standard, as established in their Code of Ordinances, which generally limits both broadband (A-weighted) and octave-band Facility noise levels at nearby residences to an equivalent level of 43 dBA. The Burrillville noise code does not distinguish between baseload and transient operations. Burrillville’s Code, however, exempts itself where “The facility generating the noise has been granted a permit or license by a federal and/or state agency and the authorization to operate within set noise limits”. CREC permitting is governed by the EFSB. Nonetheless, Invenergy examined the design approaches needed to comply with the ordinance’s broadband limit of 43 dBA during transient operations.

Typical startup and shutdown operations are projected to occur as often as once per day and lasting from 10 to 30 minutes per occurrence. Emergency steam release and emergency shutdown operations are expected to occur rarely (e.g. once per year). Note that emergency operations are exempt from the Town’s code per Section 16-35. Nonetheless, noise from these operations was analyzed and will be controlled as described herein.

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As shown in Figure 2, the nearest noise sensitive areas (NSAs) to the CREC are: (1) residences along Wallum Lake Road to the northeast, (2) residences along Jackson Schoolhouse Road to the east and southeast, (3) residences in the Doe Crossing Drive area to the west, (4) residences along Buck Hill Road to the north, and (5) residences further south along Jackson Schoolhouse Road.

A three-dimensional, computer-generated acoustical model of CREC transient operations was developed in order to predict noise levels at the NSAs and identify any need for additional mitigation measures. Transient operations differ from baseload operations in that the following additional equipment will be active:

- Typical startup: auxiliary boiler with forced draft fans, 30% to 60% steam bypass into ACC duct, steam bypass valve throttled, steam turbine stop valves throttled, auxiliary boiler startup vent open, auxiliary boiler blowdown tank, HRSG blowdown tanks, and steam turbine drains tank.
- Typical shutdown: same as typical startup, with the exception of lower levels of noise produced in the ACC duct.
- Emergency shutdown: same as typical shutdown except higher levels of ACC duct noise, and one safety release vent open.
- Emergency steam release: one safety release vent open.

Analysis results show that given the proposed acoustical design of the Facility, CREC noise levels during typical startup are expected to range from about 38 to 46 dBA at nearby residences. CREC noise levels during typical shutdown are expected to range from about 36 dBA to 45 dBA. Note that these levels are those expected during favorable sound propagation conditions, including residences being downwind of the Facility with a moderate temperature inversion present. Noise levels will be anywhere from a few dB to more than 10 dB quieter under less favorable conditions.

The predicted maximum levels, while slightly higher than the Town's 43 dBA limit, are appreciably lower than many limits found in laws, ordinances, regulations and standards promulgated throughout the U.S. for the control of industrial noise at residential land uses. Moreover, CREC transient noise levels are consistent with: (1) outdoor noise level

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guidelines historically recommended by acoustical consultants; (2) criteria for the avoidance of speech interference both outdoors and indoors; (3) criteria for the avoidance of sleep disturbance; and (4) criteria for avoidance of low-frequency noise impacts. Finally, although existing ambient noise levels for some receivers may increase during CREC transient operations, the overall magnitude and duration of CREC noise is not expected to result in significant community noise impact. Finally, the maximum predicted CREC transient noise level of 46 dBA at M1 is 4 dB lower than current Burrillville Compressor Station full-load noise levels (50 dBA at M1).

Noise levels during emergency shutdown operations are expected to range from 41 to 50 dBA at the nearest NSAs. Noise levels during an emergency steam release are expected to range from 38 to 49 dBA. While higher levels are associated with these particular transient operations, they are expected to rarely occur, and are exempt from the Burrillville ordinance.

In order to achieve these results the design of the CREC must incorporate extensive noise mitigation measures, including: installation of the combustion turbines and steam turbines within buildings; high-performance silencers installed within the air intake ductwork of the combustion turbines to reduce high-frequency (spectral) compressor and turbine blade aerodynamic noise; silencers installed on fans providing ventilation air for the combustion turbine enclosure compartments; low-noise air cooled condensers and air cooled heat exchangers; combustion turbine exhaust noise attenuated via the SCR/HRSG units and high-performance exhaust stack silencers; auxiliary boiler FD fan intake silencer banks; low-noise GSU transformers; thickened plating on the HRSG boilers and transition ducts; buildings enclosing the auxiliary boiler, gas compressors, boiler feed water pumps and water treatment equipment; acoustical enclosures over the duct burner skids; acoustically louvered ventilation openings for the auxiliary boiler and generation buildings; the installation of a low-noise steam bypass system including low-noise valves and steam discharge stack resistors (disk stack); silencers on startup vents, blowdown and drains tank vents; and silencers on safety release vents.

2.0 Author Qualifications

This report was co-authored by John Orgar, Michael Hankard, and Michael D. Theriault of Michael Theriault Acoustics, Inc. (MTA). Since 1998, MTA has provided environmental noise control consulting services to the North American electric power industry, including preparation of noise impact studies for owners and developers; implementation of large-scale noise control programs for architectural engineering firms; noise level compliance testing for constructors; and noise control due diligence reviews for municipalities and financial underwriters. MTA has advised clients on hundreds of energy facilities, ranging in size from one to 2,000 megawatts, many from conceptual design through final testing, using combustion turbine, wind turbine, biomass, and conventional fossil-fueled technologies.

3.0 State and Local Noise Level Performance Standards

Noise produced during operation of the CREC must conform to levels acceptable to the Rhode Island Energy Facilities Siting Board, (EFSB). The Town of Burrillville, through their Code of Ordinances, generally limits both broadband (A-weighted) and octave-band Facility noise levels at nearby residences to an equivalent level of 43 dBA. The Burrillville noise code does not distinguish between baseline and transient operations. Burrillville's Code however, is not applicable in instances where "The facility generating the noise has been granted a permit or license by a federal and/or state agency and the authorization to operate within set noise limits". In the case of the CREC, permitting is governed by the EFSB. Nonetheless, Invenergy examined the design approaches needed to comply with the ordinance's broadband limit of 43 dBA during transient operations.

4.0 Description of Study Area

The proposed Facility is located in the Town of Burrillville, Rhode Island, which, as shown in Figure 1, is located in the northwest corner of the state. The Facility is sited on a parcel of undeveloped land on the southwest side of Wallum Lake Road (State Highway 100), four miles west of the center of town, as shown in Figure 2. The undeveloped parcel is adjacent to and south of the existing Burrillville Compressor Station (BCS). Neighboring land in all other directions is heavily forested. Land use is primarily rural residential, and recreational due to some nearby state owned land and small lakes. There is a significant amount of foliage/trees between the site and surrounding residences.

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NSAs potentially exposed to sound level increases as a result of the proposed Facility are the focus of this noise level evaluation. NSAs are associated with indoor and/or outdoor activities that may be subject to interference from noise and include residential dwellings, hotels, hospitals, care facilities, educational facilities, places of worship and libraries. Industrial, commercial, and agricultural land uses are generally not considered sensitive to noise. The nearest NSAs to the proposed Facility are located in five general areas, as shown in Figure 2: (1) residences along both sides of Wallum Lake Road to the northeast, (2) residences along Jackson Schoolhouse Road to the east and southeast, (3) residences in the Doe Crossing Drive area to the west, (4) residences on both sides of Buck Hill Road to the north, and (5) residences further south along Jackson Schoolhouse Road.

5.0 Noise Level Prediction Methodology

An evaluation was conducted to examine the potential for transient operation of the CREC to subject sensitive land uses (e.g., residences) to interference from noise, using methodology similar to the evaluation of full load operational noise in our previous report.¹ A detailed description of the CREC facility and specific equipment can be found therein.

Transient Operation Noise Level Modeling. A three-dimensional, computer-generated acoustical model of the CREC was developed using SoundPLAN® 7.4 and industry-standard prediction algorithms to estimate noise levels at the nearest off-site receivers. SoundPLAN® 7.4 is a computer-based acoustical analysis package specially designed for predicting environmental noise levels from industrial operations and activities.² Modeling was based on the equipment shown in the plot plan in Figure 3, and assumed that all equipment associated with baseload operation would be in service in addition to equipment associated with each transient operation.

Acoustical Modeling Parameters. Acoustical modeling was based on ISO 9613-2, “Attenuation of Sound during Propagation Outdoors,” adopted by the International Standards Organization (ISO) in 1996 (updated 2012). This standard provides a widely

1 - MTA Report No. 1955, *Noise Level Evaluation for the Clear River Energy Center* (October 2015).

2 - SoundPLAN® – Braunstein + Berndt GmbH, Acoustical Modeling Software, Version 7.4, (1986-2016).

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accepted method for predicting environmental (outdoor) sound levels from sources of known emission.

Model Accuracy. ISO 9613 predictions are expected to agree with field measurements within a ± 3 -decibel range out to a distance of 1,000 meters for the meteorological and environmental conditions described. As such, noise levels presented in this analysis represent a 'best estimate' of noise emissions likely to be observed in the field during favorable sound propagation conditions.

Transient Operations and Equipment. Transient operations include typical startup and shutdown operations, which are projected to occur as often as once per day and lasting 10 to 30 minutes per occurrence. Emergency steam release and emergency shutdown operations, which are expected to occur rarely (e.g. once per year) are considered exempt from the Town's code per Section 16-35. Nonetheless, noise from these operations will be controlled as described herein. The analysis assumed the following operating conditions for each transient mode, in addition to all of the equipment that would be active during baseload operation:

- **Typical Startup:** Auxiliary boiler with boiler forced draft fans, 30 to 60% steam bypass into ACC duct, steam bypass valves throttled (HRH and LP bypass lines), steam turbine stop valves throttled, auxiliary boiler startup vent open, auxiliary boiler blowdown tank, HRSG blowdown tanks, and steam turbine drains tank.
- **Typical Shutdown:** Same as typical startup, with the exception of lower levels of noise produced in the ACC duct.
- **Emergency Shutdown:** Same as typical shutdown except levels of ACC duct noise louder than startup, and one safety release vent open.
- **Emergency Steam Release:** One safety release vent open.

Sound power levels (PWL) for all major pieces of equipment (e.g., power generation buildings, auxiliary boiler building, HRSGs, air cooled condensers, transformers, ACC ducts, bypass ducts, startup vents, blowdown tanks, etc.) were estimated using octave-band data from manufacturers, in-house measurement data, and data from industry-standard

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prediction algorithms.³ A summary of modeled components and their corresponding noise levels during normal full operation can be found in our previous noise level evaluation report. Tables 1 through 4 summarize additional modeled components and their corresponding noise levels during each transient operating mode. Note, these levels represent free-field conditions, include proposed acoustical design elements, and represent best estimates of actual levels likely to be observed in the field.

Component power levels were adjusted for the reduction of sound by distance (*geometrical spreading*); the molecular absorption of sound by air (*air absorption*); and the absorption and reflection of sound by the ground (*ground effect*). Sound levels were further modified by the effects of shielding (i.e., via buildings, tanks, equipment, topography, etc.) and by changes in source levels with direction (*directivity*) to estimate off-site receiver noise levels. The model included noise mitigation typically provided as ‘standard’ by equipment manufacturers, as well as buildings and/or enclosures primarily intended for weather protection, but which also serve to further attenuate equipment noise (see *Acoustical Design in Section 6.0*). Figure 4 provides a three-dimensional perspective view of the CREC acoustical model.

Table 1: Component Noise Levels During Typical Startup		
Equipment Description	Noise Level (dBA)	PWL/SPL
ACC Main Horizontal Ducts	82	SPL at 3 feet
ACC Riser Ducts	72	SPL at 3 feet
ACC Finger Ducts	62	SPL at 3 feet
Auxiliary Boiler Blowdown Tank Vent	95	SPL at 3 feet
Auxiliary Boiler Building – At Interior Wall	95	SPL at 3 feet
Auxiliary Boiler Forced Draft Fan	100	PWL
Auxiliary Boiler Startup Vent	95	SPL at 3 feet
Combustion Turbine Buildings – At Interior Wall	92	SPL at 3 feet
HRH Steam Bypass Ducts	79	SPL at 3 feet
HRSB Blowdown Tank Vents	95	SPL at 3 feet
LP Steam Bypass Ducts	78	SPL at 3 feet
Steam Turbine Buildings – At Interior Wall	92	SPL at 3 feet
Steam Turbine Drains Tank Vent	95	SPL at 3 feet

3 - Electric Power Plant Environmental Noise Guide, Edison Electric Institute, Bolt, Beranek and Newman, Inc. Report No. 3637, 1978.

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Table 2: Component Noise Levels During Typical Shutdown		
Equipment Description	Noise Level (dBA)	PWL/SPL
ACC Main Horizontal Ducts	72	SPL at 3 feet
ACC Riser Ducts	62	SPL at 3 feet
ACC Finger Ducts	52	SPL at 3 feet
Auxiliary Boiler Blowdown Tank Vent	95	SPL at 3 feet
Auxiliary Boiler Building – At Interior Wall	95	SPL at 3 feet
Auxiliary Boiler Forced Draft Fan	100	PWL
Auxiliary Boiler Startup Vent	95	SPL at 3 feet
Combustion Turbine Buildings – At Interior Wall	92	SPL at 3 feet
HRH Steam Bypass Ducts	69	SPL at 3 feet
HRSB Blowdown Tank Vents	95	SPL at 3 feet
LP Steam Bypass Ducts	68	SPL at 3 feet
Steam Turbine Buildings – At Interior Wall	92	SPL at 3 feet
Steam Turbine Drains Tank Vent	95	SPL at 3 feet

Table 3: Component Noise Levels as Modeled During Emergency Shutdown		
Equipment Description	Noise Level (dBA)	PWL/SPL
ACC Main Horizontal Ducts	86	SPL at 3 feet
ACC Riser Ducts	76	SPL at 3 feet
ACC Finger Ducts	66	SPL at 3 feet
Auxiliary Boiler Blowdown Tank Vent	95	SPL at 3 feet
Auxiliary Boiler Building – At Interior Wall	95	SPL at 3 feet
Auxiliary Boiler Forced Draft Fan	100	PWL
Auxiliary Boiler Startup Vent	95	SPL at 3 feet
Combustion Turbine Buildings – At Interior Wall	92	SPL at 3 feet
HRH Steam Bypass Ducts	85	SPL at 3 feet
HRSB Blowdown Tank Vents	95	SPL at 3 feet
LP Steam Bypass Ducts	80	SPL at 3 feet
Safety Relief Vent	110	SPL at 3 feet
Steam Turbine Buildings – At Interior Wall	92	SPL at 3 feet
Steam Turbine Drains Tank Vent	95	SPL at 3 feet

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Table 4: Component Noise Levels as Modeled During Emergency Steam Release		
Equipment Description	Noise Level (dBA)	PWL/SPL
Safety Relief Vent	110	SPL at 3 feet

6.0 Transient Operation Noise Level Modeling Results

For typical startup and shutdown operations, and assuming the implementation of the proposed acoustical design of the CREC, Facility noise levels under favorable sound propagation conditions are expected to range from about 36 dBA to 46 dBA at nearby residential properties. During emergency conditions, including steam releases and emergency shutdown, Facility noise levels are expected to range from about 38 dBA to 50 dBA at nearby residential properties. The following sections provide additional details for each operating mode. Modeling results are also presented as a series of noise level contours in Figures 5 through 8, and a detailed set of modeling calculations for each operating mode can be found in Appendix N1 (*Transient Operation Noise Modeling Results*).

Typical Startup. As shown in Table 5, Facility noise levels during typical startup operation (rapid response hot/cold startup) are expected to range from about 38 dBA to 46 dBA at nearby residential properties.

Table 5: CREC Noise Levels Using Proposed Acoustical Design: Typical Startup		
Location	Direction from Site/Description	CREC Noise Level*
M1	Northeast – Single family houses along Wallum Lake Road	46
M2	East – Single family houses along Jackson Schoolhouse Road	46
M3	West – Single family houses along Wilson Trail and Doe Crossing Drive	41
M4	North – Single family houses along Buck Hill Road	42
M5	South – Single family houses along Jackson Schoolhouse Road	38

*L_{AEQ}, rounded to the nearest whole decibel

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Typical Shutdown. As shown in Table 6, Facility noise levels during typical shutdown operation are expected to range from about 36 dBA to 45 dBA at nearby residential properties.

Table 6: CREC Noise Levels Using Proposed Acoustical Design: Typical Shutdown		
Location	Direction from Site/Description	CREC Noise Level*
M1	Northeast – Single family houses along Wallum Lake Road	45
M2	East – Single family houses along Jackson Schoolhouse Road	43
M3	West – Single family houses along Wilson Trail and Doe Crossing Drive	41
M4	North – Single family houses along Buck Hill Road	41
M5	South – Single family houses along Jackson Schoolhouse Road	36
*L _{AEQ} , rounded to the nearest whole decibel		

Emergency Shutdown. As shown in Table 7, Facility noise levels during emergency shutdown are expected to range from about 41 dBA to 50 dBA at nearby residential properties.

Table 7: CREC Noise Levels Using Proposed Acoustical Design: Emergency Shutdown		
Location	Direction from Site/Description	CREC Noise Level*
M1	Northeast – Single family houses along Wallum Lake Road	50
M2	East – Single family houses along Jackson Schoolhouse Road	50
M3	West – Single family houses along Wilson Trail and Doe Crossing Drive	45
M4	North – Single family houses along Buck Hill Road	44
M5	South – Single family houses along Jackson Schoolhouse Road	41
*L _{AEQ} , rounded to the nearest whole decibel		

Emergency Steam Release. As shown in Table 8, Facility noise levels during emergency steam release are expected to range from about 38 dBA to 49 dBA at nearby residential properties.

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Table 8: CREC Noise Levels Using Proposed Acoustical Design: Emergency Steam Release		
Location	Direction from Site/Description	CREC Noise Level*
M1	Northeast – Single family houses along Wallum Lake Road	49
M2	East – Single family houses along Jackson Schoolhouse Road	46
M3	West – Single family houses along Wilson Trail and Doe Crossing Drive	43
M4	North – Single family houses along Buck Hill Road	43
M5	South – Single family houses along Jackson Schoolhouse Road	38
*L _{AEO} , rounded to the nearest whole decibel		

Acoustical Design. Table 9 summarizes the noise mitigation measures that must be included in the design of the CREC in order to achieve the relatively low levels of noise described above. These measures are extensive, and include placing the combustion turbines and steam turbines within buildings; high-performance silencers installed within the air intake ductwork of the combustion turbines to reduce high-frequency (spectral) compressor and turbine blade aerodynamic noise; silencers installed on fans providing ventilation air for the combustion turbine enclosure compartments; low-noise air cooled condensers and air cooled heat exchangers; combustion turbine exhaust noise attenuated via the SCR/HRSG units and high-performance exhaust stack silencers; auxiliary boiler FD fan intake silencer banks; low-noise GSU transformers; thickened plating on the HRSG boilers and transition ducts; buildings enclosing the auxiliary boiler, gas compressors, boiler feed water pumps and water treatment equipment; acoustical enclosures over the duct burner skids; acoustically louvered ventilation openings for the auxiliary boiler and generation buildings; the installation of a low-noise steam bypass system including low-noise valves and steam discharge stack resistors (disk stack); silencers on startup vents, blowdown and drains tank vents; and silencers on safety release vents.

*Transient Operation Noise Level Evaluation for the
Clear River Energy Center*

Table 9: Proposed Acoustical Design	
Equipment Item	Control
Air Cooled Condenser	Low-Noise Design
Air Cooled Heat Exchanger	Low-Noise Design
Auxiliary Boiler	Enclosed within a Building
Auxiliary Boiler FD Fan Intake	High-Performance Duct Silencer Banks
Auxiliary Boiler Louvered Ventilation Openings	Acoustical Louvers
Auxiliary Boiler Startup Vent and Blowdown Tank	Vent Silencers
Combustion Turbine Air Intakes	High-Performance Air Intake Silencers
Combustion Turbine	Enclosed within a Building
Combustion Turbine Ventilation	Ventilation System Silencers
Combustion Turbine Exhausts	Exhaust Mitigated via SCR/HRSGs and High-Performance Exhaust Stack Silencers
Duct Burner Skids	Acoustical Enclosures
Fuel Gas Compressors	Enclosed within a Building
Generation Building Louvered Ventilation Openings	Acoustical Louvers
GSU Transformers	Low-Noise Design
HRSG Blowdown Tanks	Vent Silencers
HRSG Boiler Feedwater Pumps	Enclosed within a Building
HRSG Boilers and Transition Ducts	Thickened Plating
Steam Safety Release Vents	Vent Silencers
Steam-Turbine	Enclosed within a Building
Steam Turbine Bypass System	Low-Noise Valves and Steam Discharge Stack Resistors
Steam Turbine Drains Tank	Vent Silencers
Water Treatment Equipment	Enclosed within a Building

7.0 Transient Operation Noise Impact Analysis

Analysis results show that given the proposed acoustical design of the Facility, CREC noise levels during typical startup and typical shutdown operations under favorable sound propagation conditions are expected to range from about 36 to 46 dBA at nearby residences. These levels, while slightly higher than the Town's 43 dBA limit, will be short in duration, anywhere from 10 to 30 minutes per occurrence, and are appreciably lower than many limits found in laws, ordinances, regulations and standards promulgated throughout the U.S. for the control of industrial noise at residential land uses.

Moreover, CREC levels are consistent with: (1) outdoor noise level guidelines historically recommended by acoustical consultants; (2) criteria for the avoidance of speech interference both outdoors and indoors; (3) criteria for the avoidance of sleep disturbance; and (4) criteria for avoidance of low-frequency noise impacts. Finally, although existing ambient noise levels for some receivers may increase during CREC transient operations, the overall magnitude and duration of noise is not expected to result in significant community noise impact.

Finally, the maximum predicted CREC transient noise level of 46 dBA at M1 is 4 decibels lower than existing Burrillville Compressor Station full-load noise levels at M1 (50 dBA).⁴

⁴ - *Burrillville Compressor Station, (Providence County, Rhode Island), Results of a Pre-Construction Sound Survey and an Acoustical Analysis of Station Modifications Associated with the Proposed Algonquin Incremental Market ("AIM") Project, H&K Report No. 2976, H&K Job No. 4664, February 2014).*

*Transient Operation Noise Level Evaluation for the
Clear River Energy Center*

8.0 References

BL - Berglund, B., and Lindvall, T (Eds.), 1995, Community Noise, Archives of the Center for Sensory Research.

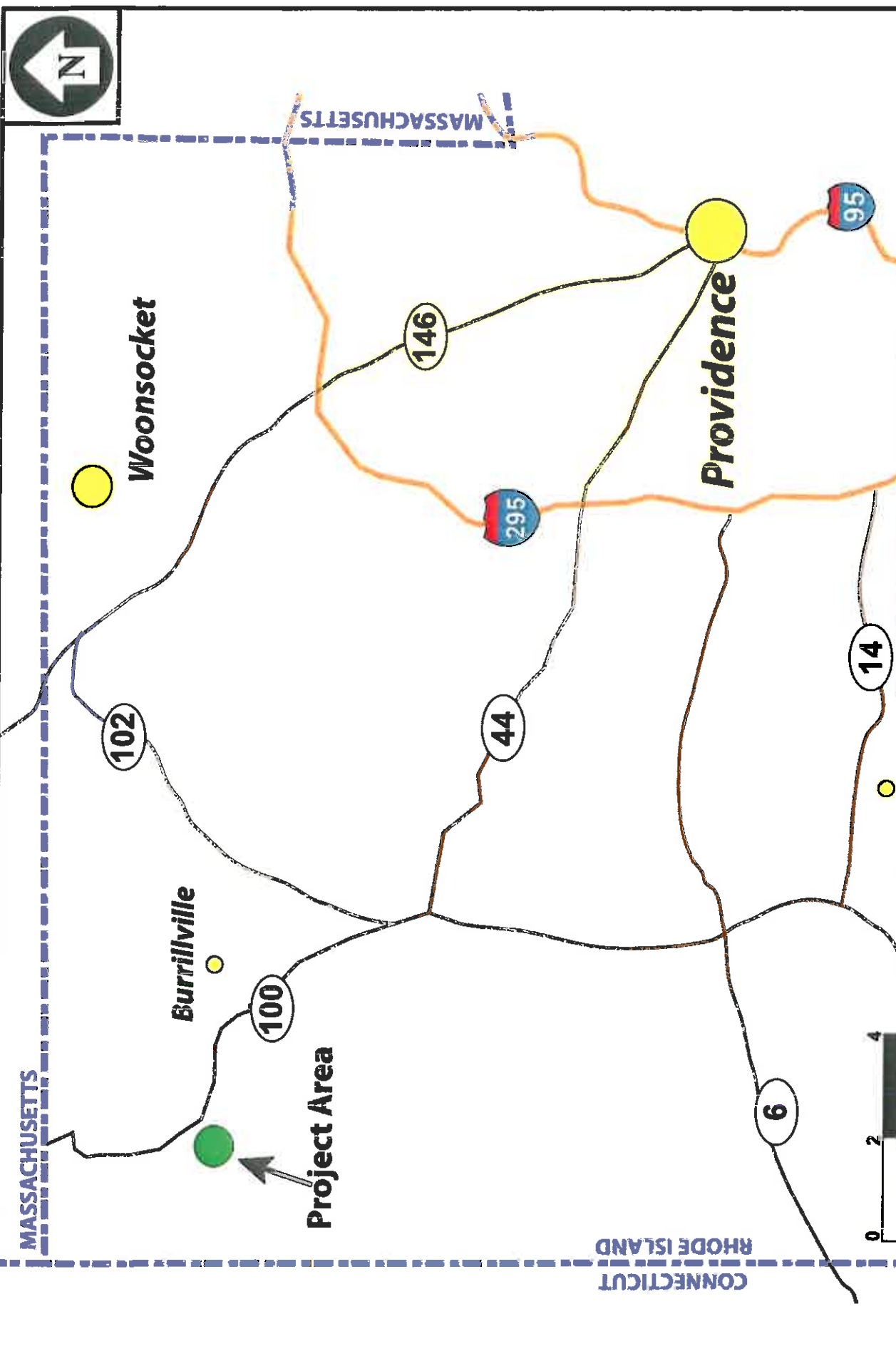
EEI - Edison Electric Institute, 1978, Electric Power Plant Environmental Noise Guide.

Hoover and Keith Report No. 2976, H&K Job No. 4664, February 2014.

Noise Level Evaluation for the Clear River Energy Center, MTA, October 2015 (Report No. 1955).

SoundPLAN® – Braunstein + Berndt GmbH, Acoustical Modeling Software, Version 7.4, (1986-2016).

WHO - World Health Organization (WHO) 1999. Guidelines for Community Noise. World Health Organization, Geneva, Switzerland.



GENERAL SITE LOCATION

CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND



FIGURE 1 PROJECT NO. 1956



NOISE SENSITIVE AREAS

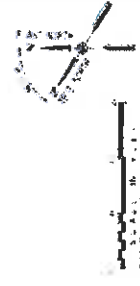
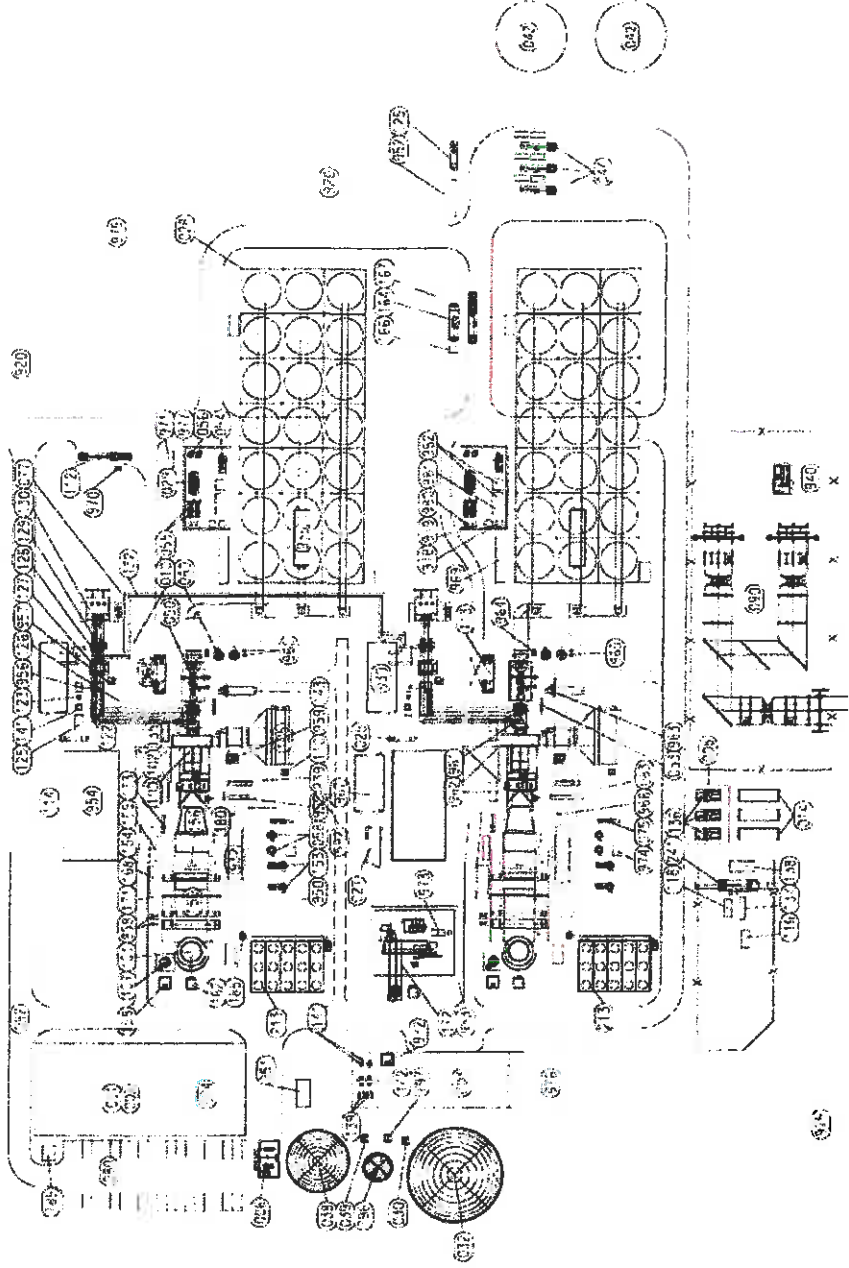
**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**

FIGURE 2

PROJECT NO. 1956



674



PROPOSED GENERAL ARRANGEMENT

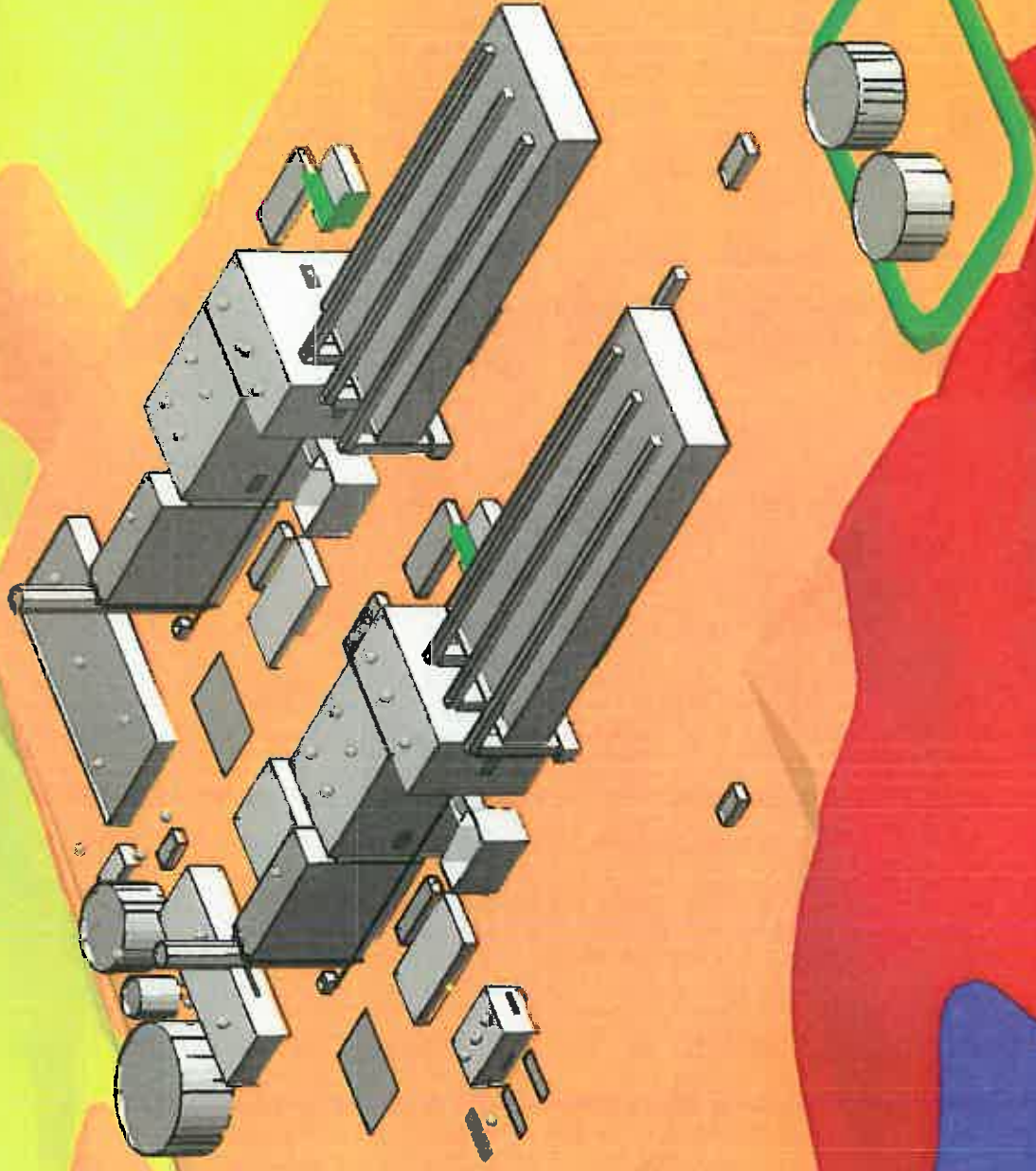
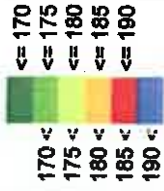
**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**

FIGURE 3

PROJECT NO. 1956



Elevation
in meters



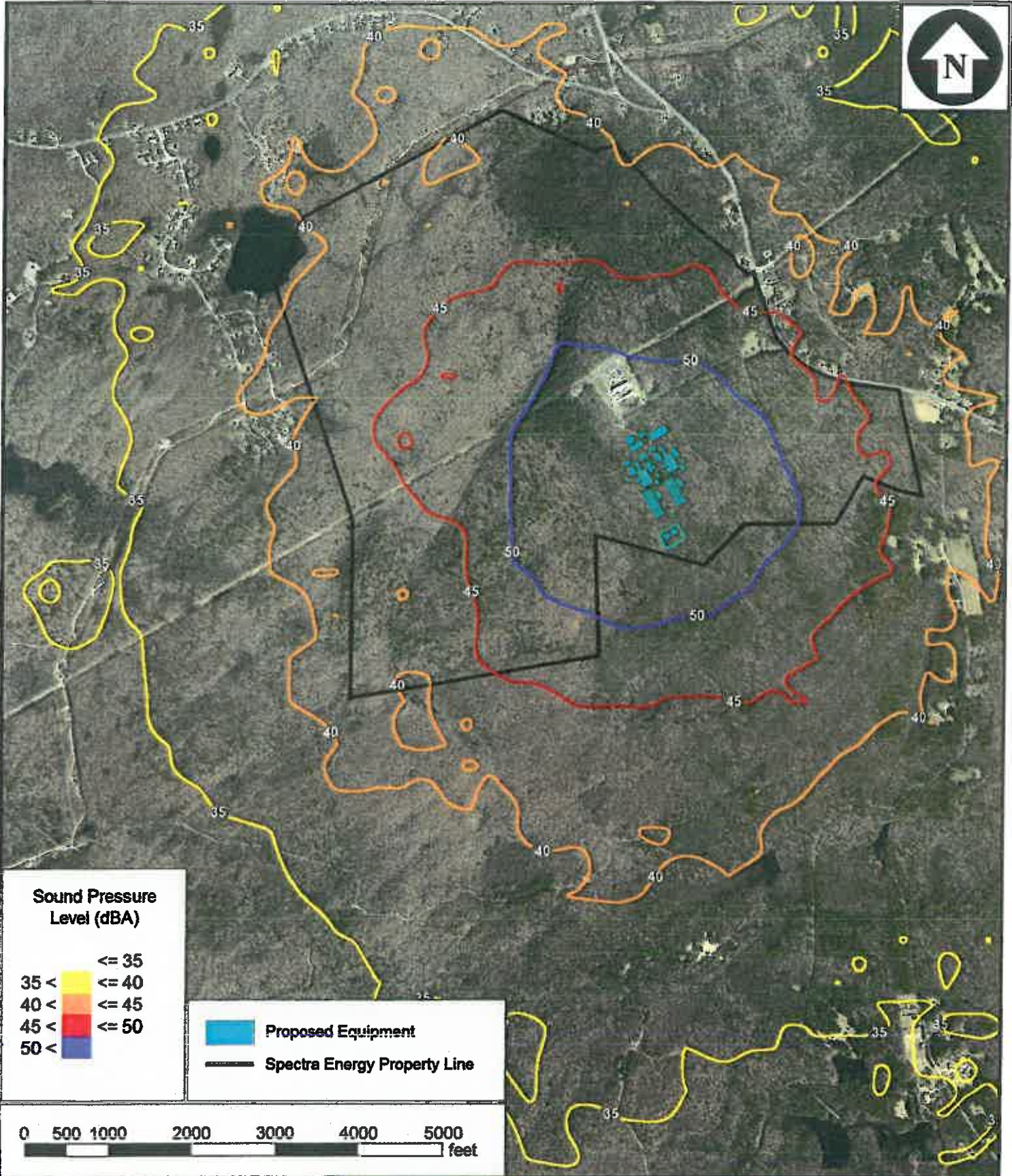
PROPOSED GENERAL ARRANGEMENT - 3D MODEL VIEW

CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND

FIGURE 4



PROJECT NO. 1956





Sound Pressure Level (dBA)

- ≤ 35
- $35 <$
- $40 <$
- $45 <$
- $50 <$

-  Proposed Equipment
-  Spectra Energy Property Line

0 500 1000 2000 3000 4000 5000 feet

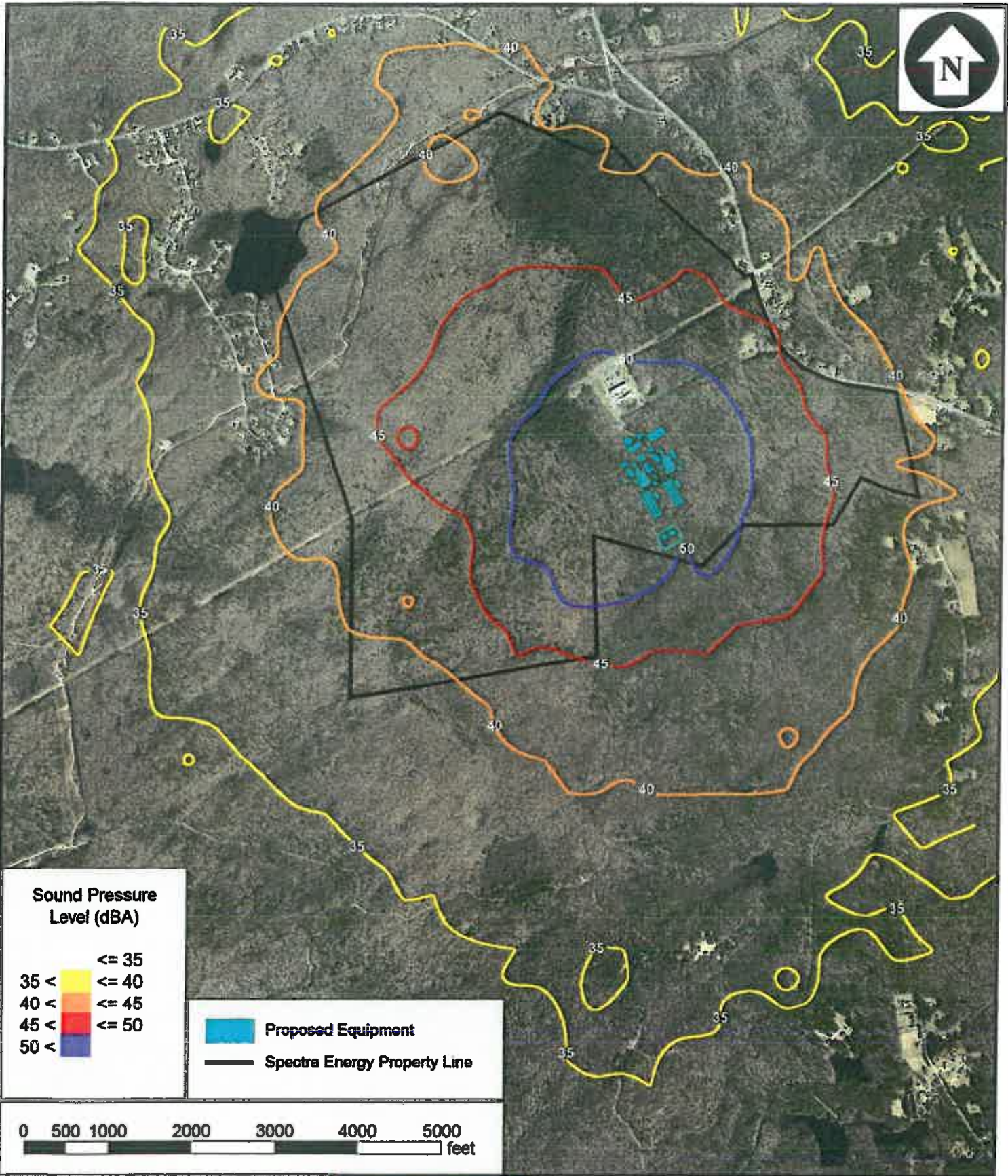
**PREDICTED NOISE LEVEL CONTOURS
WITH PROPOSED ACOUSTICAL DESIGN:
TYPICAL STARTUP**

**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**

FIGURE 5

PROJECT NO. 1956

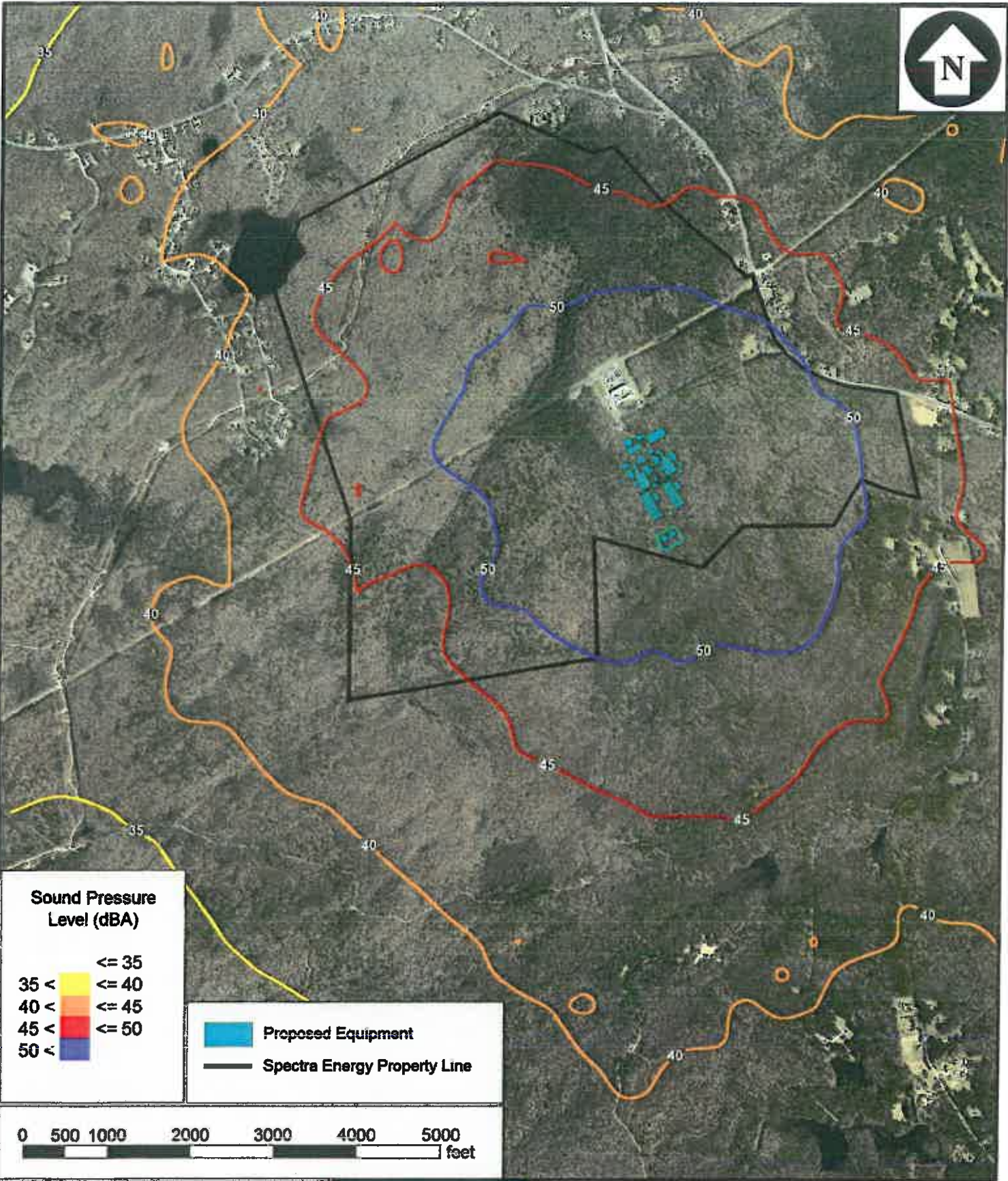




**PREDICTED NOISE LEVEL CONTOURS
WITH PROPOSED ACOUSTICAL DESIGN:
TYPICAL SHUTDOWN**



**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**





Sound Pressure Level (dBA)

- ≤ 35
- 35 < ≤ 40
- 40 < ≤ 45
- 45 < ≤ 50
- 50 <

-  Proposed Equipment
-  Spectra Energy Property Line



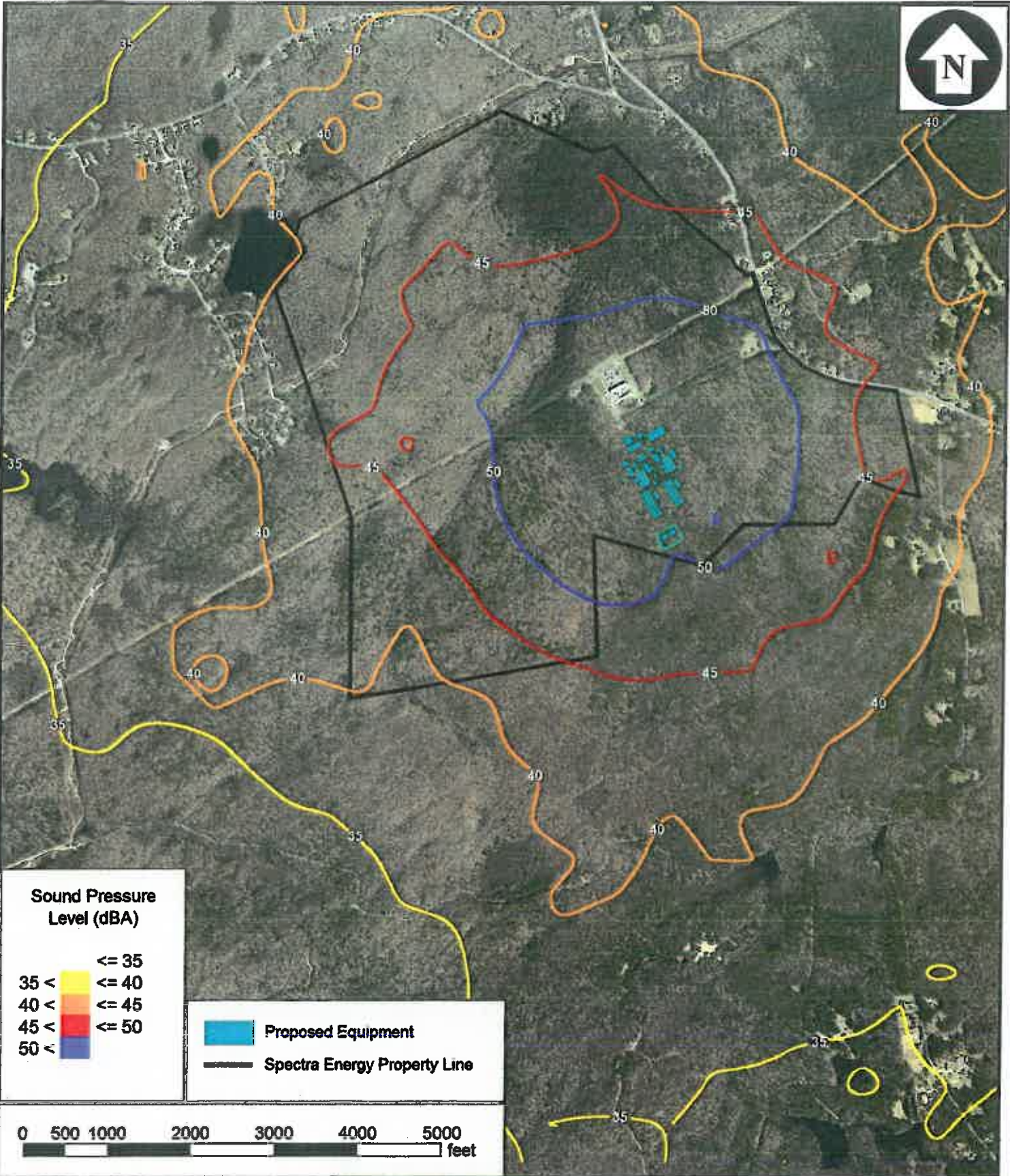
**PREDICTED NOISE LEVEL CONTOURS
WITH PROPOSED ACOUSTICAL DESIGN:
EMERGENCY SHUTDOWN**

**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**



FIGURE 7

PROJECT NO. 1956



Sound Pressure Level (dBA)

- ≤ 35
- $35 <$
- $40 <$
- $45 <$
- $50 <$

- Proposed Equipment
- Spectra Energy Property Line

0 500 1000 2000 3000 4000 5000 feet

**PREDICTED NOISE LEVEL CONTOURS
WITH PROPOSED ACOUSTICAL DESIGN:
EMERGENCY RELEASE**

**CLEAR RIVER ENERGY CENTER
BURRILLVILLE, RHODE ISLAND**



FIGURE 8

PROJECT NO. 1956

Appendix

N1 Transient Operation Noise Level Modeling Calculations and Results

N1 Transient Operation Noise Level Modeling Calculations and Results

Typical Startup

**Clear River Energy Center - Receiver Sound Levels
Typical Rapid Startup Analysis - A-Weight - ISO9613**

Name	SPL dB(A)
M1 - Wallum Lake Road	45.5
M2 - Jackson Schoolhouse Road (East)	46.0
M3 - Doe Crossing Drive	41.3
M4 - Buck Hill Road	41.7
M5 - Jackson Schoolhouse Road (South)	38.1



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**Clear River Energy Center - Receiver Spectra
Typical Rapid Startup Analysis - A-Weight - ISO9613**

31Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver M1 - Wallum Lake Road								
65.0	63.3	56.3	47.8	40.0	36.0	33.1	17.5	-37.8
Receiver M2 - Jackson Schoolhouse Road (East)								
66.6	63.8	55.9	48.9	42.8	34.9	28.4	8.6	
Receiver M3 - Doe Crossing Drive								
60.6	59.1	51.7	44.8	36.6	31.0	24.4	-6.6	
Receiver M4 - Buck Hill Road								
61.1	60.3	51.9	44.7	36.7	32.4	23.7	-12.5	
Receiver M5 - Jackson Schoolhouse Road (South)								
59.3	57.1	48.7	41.6	33.4	24.2	14.2	-29.8	



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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 1 Duct - Finger 1 A	35.9	62.00	Area	0	247.24	103.5	99.2	95.1	89.7	84.3	74.0	68.8	58.1	-19.9
ACC 1 Duct - Finger 1 B	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - Finger 1 C	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - Finger 2 A	36.0	62.00	Area	0	249.06	103.5	99.3	95.2	89.7	84.3	74.1	68.9	58.1	-19.8
ACC 1 Duct - Finger 2 B	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - Finger 2 C	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - Finger 3 A	36.0	62.00	Area	0	250.50	103.5	99.3	95.2	89.7	84.3	74.1	68.9	58.1	-19.8
ACC 1 Duct - Finger 3 B	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - Finger 3 C	35.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 1 Duct - HRH Bypass Bell A	93.8	82.00	Area	0	15.17	111.3	107.1	103.0	97.5	92.1	81.9	76.7	65.9	-12.0
ACC 1 Duct - HRH Bypass Bell B	93.8	82.00	Area	0	15.18	111.3	107.1	103.0	97.5	92.1	81.9	76.7	65.9	-12.0
ACC 1 Duct - HRH Bypass Bell C	93.9	82.00	Area	0	15.37	111.4	107.2	103.1	97.6	92.2	82.0	76.8	66.0	-11.9
ACC 1 Duct - HRH Bypass Bell D	93.6	82.00	Area	0	14.54	111.2	106.9	102.8	97.3	92.0	81.7	76.5	65.7	-12.2
ACC 1 Duct - HRH Bypass Bell E	93.9	82.00	Area	0	15.34	111.4	107.1	103.1	97.6	92.2	82.0	76.8	66.0	-11.9
ACC 1 Duct - HRH Bypass Tube A	32.6	79.00	Area	0	2.28	100.1	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 1 Duct - HRH Bypass Tube B	32.6	79.00	Area	0	2.29	100.1	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 1 Duct - HRH Bypass Tube C	32.6	79.00	Area	0	2.29	100.1	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 1 Duct - HRH Bypass Tube D	32.6	79.00	Area	0	2.29	100.1	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 1 Duct - LP Bypass Bell A	92.8	81.00	Area	0	15.17	110.3	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 1 Duct - LP Bypass Bell B	92.8	81.00	Area	0	15.18	110.3	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 1 Duct - LP Bypass Bell C	92.9	81.00	Area	0	15.37	110.4	106.2	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 1 Duct - LP Bypass Bell D	92.6	81.00	Area	0	14.54	110.2	105.9	101.8	96.3	91.0	80.7	75.5	64.7	-13.2
ACC 1 Duct - LP Bypass Bell E	92.9	81.00	Area	0	15.34	110.4	106.1	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 1 Duct - LP Bypass Tube A	81.6	78.00	Area	0	2.30	99.2	94.9	90.8	85.3	79.9	69.7	64.5	53.7	-24.2
ACC 1 Duct - LP Bypass Tube B	81.6	78.00	Area	0	2.30	99.2	94.9	90.8	85.3	80.0	69.7	64.5	53.7	-24.2
ACC 1 Duct - LP Bypass Tube C	81.6	78.00	Area	0	2.30	99.2	94.9	90.8	85.4	80.0	69.7	64.5	53.7	-24.2
ACC 1 Duct - LP Bypass Tube D	81.6	78.00	Area	0	2.30	99.2	94.9	90.8	85.3	79.9	69.7	64.5	53.7	-24.2
ACC 1 Duct - Main A	103.4	82.00	Area	0	136.57	120.9	116.6	112.5	107.1	101.7	91.4	86.2	75.5	-2.4
ACC 1 Duct - Main B	97.7	82.00	Area	0	37.17	115.2	111.0	106.9	101.4	96.0	85.8	80.8	69.8	-8.1
ACC 1 Duct - Main C	101.1	82.00	Area	0	80.99	118.6	114.4	110.3	104.8	99.4	89.2	84.0	73.2	-4.7
ACC 1 Duct - Main D	97.7	82.00	Area	0	37.41	115.3	111.0	106.9	101.5	96.1	85.8	80.6	69.9	-8.1
ACC 1 Duct - Main E	95.0	82.00	Area	0	19.86	112.5	108.3	104.2	98.7	93.3	83.1	77.9	67.1	-10.8

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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Well	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Duct - Main F	94.6	82.00	Area	0	18.21	112.1	107.9	103.8	98.3	92.9	82.7	77.5	66.7	-11.2
ACC 1 Duct - Main G	101.1	82.00	Area	0	81.62	118.7	114.4	110.3	104.8	99.4	88.2	84.0	73.2	-4.7
ACC 1 Duct - Main H	103.4	82.00	Area	0	136.57	120.9	116.6	112.5	107.1	101.7	91.4	86.2	75.5	-2.4
ACC 1 Duct - Main M	94.9	82.00	Area	0	19.41	112.4	108.2	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 1 Duct - Main N	103.5	82.00	Area	0	142.12	121.1	116.8	112.7	107.3	101.9	91.6	86.4	75.6	-2.3
ACC 1 Duct - Main O	102.8	82.00	Area	0	120.75	120.4	116.1	112.0	106.5	101.2	90.9	85.7	74.9	-3.0
ACC 1 Duct - Main P	102.8	82.00	Area	0	121.31	120.4	116.1	112.0	106.5	101.2	90.9	85.7	75.0	-3.0
ACC 1 Duct - Main Q	102.9	82.00	Area	0	121.95	120.4	116.2	112.1	106.6	101.2	91.0	85.8	75.0	-2.9
ACC 1 Duct - Main R	95.4	82.00	Area	0	21.64	112.9	108.6	104.5	99.1	93.7	83.4	78.2	67.5	-10.4
ACC 1 Duct - Main S	95.2	82.00	Area	0	21.04	112.8	108.5	104.4	99.0	93.6	83.3	78.1	67.4	-10.6
ACC 1 Duct - Riser 1 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 1 B	90.1	72.00	Area	0	64.21	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Duct - Riser 1 C	90.0	72.00	Area	0	63.57	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 1 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Duct - Riser 2 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 2 B	90.1	72.00	Area	0	64.21	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Duct - Riser 2 C	90.0	72.00	Area	0	63.56	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 2 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Duct - Riser 3 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 3 B	90.1	72.00	Area	0	64.20	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Duct - Riser 3 C	90.0	72.00	Area	0	63.58	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 1 Duct - Riser 3 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 1 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Duct - Finger 1 A	85.9	62.00	Area	0	247.24	103.5	99.2	95.1	89.7	84.3	74.0	68.8	58.1	-19.9
ACC 2 Duct - Finger 1 B	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 2 Duct - Finger 1 C	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 2 Duct - Finger 2 A	86.0	62.00	Area	0	249.06	103.5	99.3	95.2	89.7	84.3	74.1	68.9	58.1	-19.8
ACC 2 Duct - Finger 2 B	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 2 Duct - Finger 2 C	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 2 Duct - Finger 3 A	86.0	62.00	Area	0	250.50	103.5	99.3	95.2	89.7	84.3	74.1	68.9	58.1	-19.8
ACC 2 Duct - Finger 3 B	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9
ACC 2 Duct - Finger 3 C	85.9	62.00	Area	0	245.91	103.4	99.2	95.1	89.6	84.2	74.0	68.8	58.0	-19.9

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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - HRH Bypass Bell A	93.8	82.00	Area	0	15.18	111.3	107.1	103.0	97.5	92.1	81.9	76.7	65.9	-12.0
ACC 2 Duct - HRH Bypass Bell B	93.8	82.00	Area	0	15.18	111.3	107.1	103.0	97.5	92.1	81.9	76.7	65.9	-12.0
ACC 2 Duct - HRH Bypass Bell C	93.9	82.00	Area	0	15.37	111.4	107.2	103.1	97.6	92.2	82.0	76.8	66.0	-11.9
ACC 2 Duct - HRH Bypass Bell D	93.6	82.00	Area	0	14.54	111.2	106.9	102.8	97.4	92.0	81.7	76.5	65.7	-12.2
ACC 2 Duct - HRH Bypass Bell E	93.9	82.00	Area	0	15.34	111.4	107.1	103.1	97.6	92.2	82.0	76.8	66.0	-11.9
ACC 2 Duct - HRH Bypass Tube A	82.6	79.00	Area	0	2.30	100.2	95.9	91.8	86.3	81.0	70.7	65.5	54.7	-23.2
ACC 2 Duct - HRH Bypass Tube B	82.6	79.00	Area	0	2.30	100.1	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 2 Duct - HRH Bypass Tube C	82.6	79.00	Area	0	2.30	100.2	95.9	91.8	86.3	80.9	70.7	65.5	54.7	-23.2
ACC 2 Duct - HRH Bypass Tube D	82.6	79.00	Area	0	2.30	100.2	95.9	91.8	86.3	81.0	70.7	65.5	54.7	-23.2
ACC 2 Duct - LP Bypass Bell A	92.8	81.00	Area	0	15.18	110.3	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 2 Duct - LP Bypass Bell B	92.8	81.00	Area	0	15.18	110.3	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 2 Duct - LP Bypass Bell C	92.9	81.00	Area	0	15.37	110.4	106.2	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 2 Duct - LP Bypass Bell D	92.6	81.00	Area	0	14.54	110.2	105.9	101.8	96.4	91.0	80.7	75.5	64.7	-13.2
ACC 2 Duct - LP Bypass Bell E	92.9	81.00	Area	0	15.34	110.4	106.1	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 2 Duct - LP Bypass Tube A	81.6	78.00	Area	0	2.31	99.2	94.9	90.8	85.4	80.0	69.7	64.5	53.8	-24.2
ACC 2 Duct - LP Bypass Tube B	81.6	78.00	Area	0	2.31	99.2	94.9	90.8	85.4	80.0	69.7	64.5	53.8	-24.2
ACC 2 Duct - LP Bypass Tube C	81.6	78.00	Area	0	2.31	99.2	94.9	90.8	85.4	80.0	69.7	64.5	53.8	-24.2
ACC 2 Duct - LP Bypass Tube D	81.6	78.00	Area	0	2.31	99.2	94.9	90.8	85.4	80.0	69.7	64.5	53.8	-24.2
ACC 2 Duct - Main A	99.2	82.00	Area	0	52.37	116.7	112.5	108.4	102.9	97.5	87.3	82.1	71.3	-6.6
ACC 2 Duct - Main B	97.8	82.00	Area	0	36.49	115.2	110.9	106.8	101.3	95.9	85.7	80.5	69.7	-8.2
ACC 2 Duct - Main D	97.8	82.00	Area	0	37.90	115.3	111.1	107.0	101.5	96.1	85.9	80.7	69.9	-8.0
ACC 2 Duct - Main E	94.6	82.00	Area	0	18.33	112.2	107.9	103.8	98.4	93.0	82.7	77.5	66.8	-11.2
ACC 2 Duct - Main F	94.2	82.00	Area	0	16.54	111.7	107.5	103.4	97.9	92.5	82.3	77.1	66.3	-11.6
ACC 2 Duct - Main H	99.2	82.00	Area	0	52.36	116.7	112.5	108.4	102.9	97.5	87.3	82.1	71.3	-6.6
ACC 2 Duct - Main M	94.9	82.00	Area	0	19.41	112.4	108.2	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 2 Duct - Main N	103.5	82.00	Area	0	142.12	121.1	116.8	112.7	107.3	101.9	91.6	86.4	75.6	-2.3
ACC 2 Duct - Main O	102.8	82.00	Area	0	121.31	120.4	116.1	112.0	106.6	101.2	90.9	85.7	75.0	-3.0
ACC 2 Duct - Main P	102.8	82.00	Area	0	120.75	120.4	116.1	112.0	106.5	101.1	90.9	85.7	74.9	-3.0
ACC 2 Duct - Main Q	95.4	82.00	Area	0	21.64	112.9	108.6	104.5	99.1	93.7	83.4	78.2	67.5	-10.4
ACC 2 Duct - Main R	95.2	82.00	Area	0	21.01	112.8	108.5	104.4	98.9	93.6	83.3	78.1	67.3	-10.6
ACC 2 Duct - Main S	102.9	82.00	Area	0	121.95	120.4	116.2	112.1	106.6	101.2	91.0	85.8	75.0	-2.9
ACC 2 Duct - Riser 1 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 1 B	90.1	72.00	Area	0	64.21	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7



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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - Riser 1 C	90.0	72.00	Area	0	63.57	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 1 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 2 Duct - Riser 2 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 2 B	90.1	72.00	Area	0	64.21	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 2 Duct - Riser 2 C	90.0	72.00	Area	0	63.56	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 2 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 2 Duct - Riser 3 A	90.0	72.00	Area	0	63.74	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 3 B	90.1	72.00	Area	0	64.20	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 2 Duct - Riser 3 C	90.0	72.00	Area	0	63.58	107.6	103.3	99.2	93.8	88.4	78.1	72.9	62.2	-15.8
ACC 2 Duct - Riser 3 D	90.1	72.00	Area	0	64.39	107.6	103.4	99.3	93.8	88.4	78.2	73.0	62.2	-15.7
ACC 2 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACHE 1	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
ACHE 2	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
Air Process Skid 2	93.0	93.00	Point	0	85.9	96.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Air Process Skid 2	93.0	93.00	Point	0	85.9	96.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Ammonia Forwarcng Pump	93.1	93.10	Point	0	86.0	97.0	91.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Ammonia Injection Skid 1	98.1	98.10	Point	0	91.0	102.0	96.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Ammonia Injection Skid 2	98.1	98.10	Point	0	91.0	102.0	96.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Aux Boiler Building - East Side	88.0	64.26	Area	3	234.94	108.8	102.7	100.7	91.7	81.7	68.7	57.7	51.7	43.7
Aux Boiler Building - North Side	88.5	64.26	Area	3	288.09	109.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - Roof	91.9	64.26	Area	0	579.10	112.7	106.6	104.6	95.7	85.7	72.6	61.6	55.7	47.6
Aux Boiler Building - South Side	88.5	64.26	Area	3	268.09	109.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - West Side	88.0	64.26	Area	3	235.85	108.8	102.7	100.7	91.8	81.8	68.7	57.7	51.8	43.7
Aux Boiler Building Vent Louvers - North	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler Building Vent Louvers - South	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler FD Fan Inlet	100.0	100.00	Point	0	102.3	102.3	102.8	101.7	101.7	98.8	94.8	87.8	80.8	75.7
Aux Boiler Stack Exhaust	100.0	100.00	Point	0	102.2	102.2	102.2	100.2	99.2	97.2	93.2	90.2	87.2	94.2
Aux Transformer 1 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6

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Aux Transformer 2 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
BFW Pump Enclosure 1-Side 1	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 2	97.2	76.92	Area	3	107.28	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Side 3	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Top	103.5	76.92	Area	0	452.03	119.5	116.9	113.9	108.9	96.9	90.9	86.9	78.9	72.9
BFW Pump Enclosure 2-Side 1	94.4	76.92	Area	3	55.67	110.4	107.8	104.8	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 2	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Side 3	94.4	76.92	Area	3	55.43	110.4	107.8	104.7	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Top	103.4	76.92	Area	0	445.84	119.4	116.9	113.8	108.8	96.9	90.9	86.9	78.9	72.8
Condensate Equipment Bldg 1 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 1 - North Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - South Side	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 1 - West Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - East Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - East Side	75.2	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - North Side	77.7	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - South Side	75.2	56.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 2 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
CTG 1 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG 2 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG Air Inlet 1	106.2	82.90	Area	0	213.41	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet 2	106.2	82.93	Area	0	211.99	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet Duct 1 - North	99.9	84.40	Area	0	35.83	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - South	99.9	84.44	Area	0	35.50	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - Top	99.9	83.26	Area	0	46.57	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - North	99.9	84.32	Area	0	36.52	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - South	99.9	84.29	Area	0	36.74	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0

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CTG Air Inlet Duct 2 - Top	99.9	83.15	Area	0	47.70	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Building 1 - East Facade	95.1	64.70	Area	3	1101.55	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 - North Facade	94.0	64.70	Area	3	851.17	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 1 - Roof	89.9	59.70	Area	0	1047.08	111.5	105.3	104.6	89.6	78.8	66.5	64.2	61.3	52.4
CTG Building 1 - West Facade	95.1	64.70	Area	3	1100.83	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - West	70.1	57.55	Area	3	18.00	96.3	87.6	84.9	65.9	54.1	42.8	37.5	36.6	30.7
CTG Building 2 - East Facade	95.1	64.70	Area	3	1100.24	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 - North Facade	94.0	64.70	Area	3	852.46	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 2 - Roof	89.9	59.70	Area	0	1045.75	111.5	105.3	104.6	89.6	78.8	66.5	64.2	61.3	52.4
CTG Building 2 - West Facade	95.1	64.70	Area	3	1098.21	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - West	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
Demin Water Pump	93.1	93.10	Point	0	86.0	86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Duct Burner Skid 1	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	86.9	87.9	86.9	82.9
Duct Burner Skid 2	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	86.9	87.9	86.9	82.9
Emergency Diesel Generator - Side 1	8.2	-7.75	Area	3	38.95	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Side 2	8.2	-7.76	Area	3	38.02	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Top	8.2	-8.56	Area	0	46.93	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Excitation Transformer 1	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Excitation Transformer 2	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Fire Pump Building - Roof	-4.1	-23.30	Area	0	82.33	10.1	13.1	7.1	1.1	-12.9	-21.9	-28.9	-34.9	-35.9
Fire Pump Building - Side 1	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 2	-8.5	-23.30	Area	3	29.99	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fire Pump Building - Side 3	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 4	-8.5	-23.30	Area	3	30.11	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fuel Gas Dewpoint Heater	102.2	85.30	Area	0	49.02	97.9	95.7	83.8	81.7	76.0	77.8	85.5	83.9	103.1
Fuel Gas Metering and Regulating Station	93.0	93.00	Point	0	-15.6	-15.6	-15.6	-15.6	72.4	74.4	79.4	89.4	87.4	79.4
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Gas Aftercooler 1	101.0	84.00	Area	0	50.09	98.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2

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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Gas Aftercooler 2	101.0	83.86	Area	0	51.73	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2
Gas Compressor Bldg Louvers - E	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	98.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - N	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	98.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - S	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	98.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - W	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	98.7	97.7	96.7	94.7
Gas Compressor Building - East Side	99.1	76.70	Area	3	173.15	113.3	116.3	110.3	104.3	90.3	81.3	74.3	66.3	67.3
Gas Compressor Building - North Side	97.5	76.70	Area	3	119.51	111.7	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - Roof	101.0	76.70	Area	0	269.92	115.3	118.2	112.2	106.3	92.3	83.2	76.2	70.3	69.2
Gas Compressor Building - South Side	97.5	76.70	Area	3	120.04	111.8	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - West Side	99.1	76.70	Area	3	173.41	113.4	116.3	110.3	104.3	90.3	81.3	74.3	66.3	67.3
GSU 1 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
HRSG 1 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Body - Side 2	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Exhaust Stack	102.4	102.42	PcInt	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 1 - Piping and Valves	98.5	80.00	Line	0	71.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 1 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0



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Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
HRSRG 1 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 1 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 1 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 1 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 1 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - Body - Side 1	97.0	68.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSRG 2 - Body - Side 2	97.0	68.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSRG 2 - Exhaust Stack	102.4	102.42	Point	0	70.44	117.6	123.0	116.0	102.0	84.0	81.0	69.0	58.0	47.0
HRSRG 2 - Piping and Valves	98.5	80.06	Line	0	118.98	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSRG 2 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSRG 2 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - T1 - Top	96.6	82.78	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG 2 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSRG Recirc Pump 1	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
HRSRG Recirc Pump 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Isolation Transformer 1	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Isolation Transformer 2	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Rooftop Vent Fan - Admin 1	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 2	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 3	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 4	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0	95.0	95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0

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Clear River Energy Center - Source List Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	Src Type	KO-Wait	Size m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Rooftop Vent Fan - CTG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment: Bldg1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment: Bldg2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Safety Vent	29.0	29.00	Point	0		13.4	20.9	27.0	28.0	18.0	10.8	21.9	23.0	24.0
Scanner Cooling Air Blower 1	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Scanner Cooling Air Blower 2	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Service Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Startup Vent - Aux Boiler Blowdown	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Aux Boiler Startup	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 1	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 2	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Steam Turbine Drains Tank	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Steam Turbine Bldg 1 - East Facade	92.4	64.93	Area	3	554.75	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 1 - North Facade	90.7	64.93	Area	3	373.57	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9
Steam Turbine Bldg 1 - Roof	88.8	59.93	Area	0	764.72	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 1 - South Facade	95.7	64.93	Area	3	1206.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 1 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - East Facade	92.4	64.93	Area	3	553.90	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - North Facade	90.7	64.93	Area	3	374.51	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9



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Source	PWL dB(A)	Lw'	SrcType	KO-Well	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Steam Turbine Bldg 2 - Roof	88.8	59.93	Area	0	764.05	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 2 - South Facade 1	95.7	64.93	Area	3	1206.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 2 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
STG Building 1 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 2	88.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 2	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STW Heat Exchanger 1	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	96.2	97.2	96.2	95.2	94.2	86.2
STW Heat Exchanger 2	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	96.2	97.2	96.2	95.2	94.2	86.2
Waste Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Water Treatment Building - East Side	78.9	56.70	Area	3	167.69	93.2	96.2	90.2	84.2	70.2	61.2	54.2	48.2	47.2
Water Treatment Building - North Side	83.3	56.70	Area	3	452.35	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - Roof	86.4	56.70	Area	0	939.65	100.7	103.6	97.6	91.7	77.7	68.6	61.6	55.7	54.7
Water Treatment Building - South Side	83.3	56.70	Area	3	453.24	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - West Side	78.9	56.70	Area	3	167.20	93.2	96.1	90.2	84.2	70.2	61.2	54.2	48.2	47.2
WTB Ventilation Louvers - North Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0
WTB Ventilation Louvers - South Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0



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Clear River Energy Center - Mean Propagation Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Receiver M1 - Wallum Lake Road												
ACC 1 Bottom	109.0	72.7	0.0	0.0	789.6	-68.9	1.0	-2.9	-3.2	-8.3	0.0	26.7
ACC 1 Duct - Finger 1 A	85.9	62.0	0.0	0.0	691.9	-67.8	-0.5	-4.2	-1.0	0.0	0.0	12.5
ACC 1 Duct - Finger 1 B	85.9	62.0	0.0	0.0	690.7	-67.8	-0.5	-1.0	-1.2	0.0	2.6	18.0
ACC 1 Duct - Finger 1 C	85.9	62.0	0.0	0.0	692.8	-67.8	-0.5	-7.2	-0.8	0.0	0.2	9.8
ACC 1 Duct - Finger 2 A	86.0	62.0	0.0	0.0	704.1	-67.9	-0.5	-4.3	-1.0	0.0	0.0	12.3
ACC 1 Duct - Finger 2 B	85.9	62.0	0.0	0.0	702.9	-67.9	-0.5	-4.3	-0.9	0.0	2.4	14.6
ACC 1 Duct - Finger 2 C	85.9	62.0	0.0	0.0	705.1	-68.0	-0.5	-11.0	-0.6	0.0	0.1	6.0
ACC 1 Duct - Finger 3 A	86.0	62.0	0.0	0.0	716.5	-68.1	-0.5	-4.3	-1.0	0.0	0.0	12.2
ACC 1 Duct - Finger 3 B	85.9	62.0	0.0	0.0	715.4	-68.1	-0.5	-4.5	-0.9	0.0	2.1	14.0
ACC 1 Duct - Finger 3 C	85.9	62.0	0.0	0.0	717.5	-68.1	-0.5	-8.0	-0.7	0.0	0.6	8.2
ACC 1 Duct - HRH Bypass Bell A	93.8	82.0	0.0	0.0	660.8	-67.4	0.6	-21.2	-0.5	0.0	0.0	5.3
ACC 1 Duct - HRH Bypass Bell B	93.8	82.0	0.0	0.0	660.7	-67.4	1.1	-19.4	-0.5	0.0	0.0	7.7
ACC 1 Duct - HRH Bypass Bell C	93.9	82.0	0.0	0.0	669.0	-67.4	0.8	-20.3	-0.5	0.0	1.3	7.8
ACC 1 Duct - HRH Bypass Bell D	93.6	82.0	0.0	0.0	660.0	-67.4	0.8	-13.1	-0.4	0.0	0.3	13.7
ACC 1 Duct - HRH Bypass Bell E	93.9	82.0	0.0	0.0	662.6	-67.4	0.8	-20.3	-0.4	0.0	2.0	8.5
ACC 1 Duct - HRH Bypass Tube A	82.6	79.0	0.0	0.0	659.4	-67.4	0.7	-13.0	-0.5	0.0	0.0	2.5
ACC 1 Duct - HRH Bypass Tube B	82.6	79.0	0.0	0.0	659.1	-67.4	0.8	-13.0	-0.5	0.0	0.2	2.7
ACC 1 Duct - HRH Bypass Tube C	82.6	79.0	0.0	0.0	659.7	-67.4	0.8	-17.2	-0.4	0.0	0.0	-1.6
ACC 1 Duct - HRH Bypass Tube D	82.6	79.0	0.0	0.0	659.4	-67.4	0.8	-13.1	-0.5	0.0	0.0	2.5
ACC 1 Duct - LP Bypass Bell A	92.8	81.0	0.0	0.0	665.1	-67.4	0.6	-21.4	-0.5	0.0	0.0	4.2
ACC 1 Duct - LP Bypass Bell B	92.8	81.0	0.0	0.0	665.0	-67.4	1.2	-15.4	-0.4	0.0	0.0	9.7
ACC 1 Duct - LP Bypass Bell C	92.9	81.0	0.0	0.0	663.3	-67.4	0.8	-18.8	-0.4	0.0	0.9	7.9
ACC 1 Duct - LP Bypass Bell D	92.6	81.0	0.0	0.0	664.4	-67.4	0.8	-14.9	-0.4	0.0	0.4	11.1
ACC 1 Duct - LP Bypass Bell E	92.9	81.0	0.0	0.0	666.9	-67.5	0.8	-17.9	-0.4	0.0	0.2	8.1
ACC 1 Duct - LP Bypass Tube A	81.6	78.0	0.0	0.0	663.8	-67.4	0.8	-14.7	-0.4	0.0	0.0	-0.2
ACC 1 Duct - LP Bypass Tube B	81.6	78.0	0.0	0.0	663.4	-67.4	0.8	-14.8	-0.4	0.0	0.3	0.1
ACC 1 Duct - LP Bypass Tube C	81.6	78.0	0.0	0.0	664.1	-67.4	0.8	-17.4	-0.4	0.0	0.0	-2.8
ACC 1 Duct - LP Bypass Tube D	81.6	78.0	0.0	0.0	663.7	-67.4	0.8	-13.5	-0.4	0.0	0.0	1.1
ACC 1 Duct - Main A	103.4	82.0	0.0	0.0	655.1	-67.3	0.5	-10.4	-0.9	0.0	0.3	25.6
ACC 1 Duct - Main B	97.7	82.0	0.0	0.0	649.9	-67.2	0.7	-23.3	-0.6	0.0	0.9	8.2
ACC 1 Duct - Main C	101.1	82.0	0.0	0.0	658.7	-67.4	0.7	-22.2	-0.5	0.0	2.7	14.5



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 1 Duct - Main D	97.7	82.0	0.0	0.0	645.2	-67.2	0.7	-7.1	-0.8	0.0	1.1	24.5
ACC 1 Duct - Main E	95.0	82.0	0.0	0.0	648.0	-67.2	0.7	-3.3	-1.1	0.0	2.0	26.0
ACC 1 Duct - Main F	94.6	82.0	0.0	0.0	651.2	-67.3	0.7	-4.9	-0.9	0.0	0.0	22.3
ACC 1 Duct - Main G	101.1	82.0	0.0	0.0	660.5	-67.4	0.8	-9.8	-0.5	0.0	0.0	24.2
ACC 1 Duct - Main H	103.4	82.0	0.0	0.0	655.0	-67.3	1.2	-8.8	-0.7	0.0	1.5	29.3
ACC 1 Duct - Main M	94.9	82.0	0.0	0.0	697.2	-67.9	1.0	-17.2	-0.4	0.0	3.5	13.9
ACC 1 Duct - Main N	103.5	82.0	0.0	0.0	682.0	-67.7	0.7	-22.1	-0.6	0.0	2.6	16.4
ACC 1 Duct - Main O	102.8	82.0	0.0	0.0	684.2	-67.7	1.4	-13.9	-0.4	0.0	0.1	22.3
ACC 1 Duct - Main P	102.8	82.0	0.0	0.0	685.0	-67.7	0.9	-18.0	-0.4	0.0	0.4	18.0
ACC 1 Duct - Main Q	102.9	82.0	0.0	0.0	683.4	-67.7	0.9	-25.1	-0.8	0.0	2.1	12.3
ACC 1 Duct - Main R	95.4	82.0	0.0	0.0	670.2	-67.5	0.8	-14.5	-0.4	0.0	0.2	14.0
ACC 1 Duct - Main S	95.2	82.0	0.0	0.0	688.4	-67.5	0.8	-18.0	-0.4	0.0	1.1	11.3
ACC 1 Duct - Riser 1 A	90.0	72.0	0.0	0.0	668.7	-67.5	-0.1	-7.3	-0.6	0.0	0.5	15.1
ACC 1 Duct - Riser 1 B	90.1	72.0	0.0	0.0	670.7	-67.5	-0.1	-10.2	-0.5	0.0	0.1	11.8
ACC 1 Duct - Riser 1 C	90.0	72.0	0.0	0.0	671.7	-67.5	-0.1	-15.4	-0.4	0.0	0.0	6.5
ACC 1 Duct - Riser 1 D	90.1	72.0	0.0	0.0	669.6	-67.5	-0.1	-8.7	-0.5	0.0	0.5	13.7
ACC 1 Duct - Riser 2 A	90.0	72.0	0.0	0.0	681.2	-67.7	-0.1	-9.2	-0.5	0.0	0.7	13.2
ACC 1 Duct - Riser 2 B	90.1	72.0	0.0	0.0	683.3	-67.7	-0.1	-13.1	-0.4	0.0	0.2	8.9
ACC 1 Duct - Riser 2 C	90.0	72.0	0.0	0.0	684.2	-67.7	-0.1	-15.8	-0.4	0.0	0.0	6.0
ACC 1 Duct - Riser 2 D	90.1	72.0	0.0	0.0	682.1	-67.7	-0.1	-10.1	-0.5	0.0	0.6	12.3
ACC 1 Duct - Riser 3 A	90.0	72.0	0.0	0.0	694.0	-67.8	-0.1	-9.9	-0.5	0.0	2.8	14.5
ACC 1 Duct - Riser 3 B	90.1	72.0	0.0	0.0	696.1	-67.8	-0.1	-14.7	-0.4	0.0	3.0	10.0
ACC 1 Duct - Riser 3 C	90.0	72.0	0.0	0.0	697.0	-67.9	-0.1	-15.8	-0.4	0.0	7.0	12.9
ACC 1 Duct - Riser 3 D	90.1	72.0	0.0	0.0	695.0	-67.8	-0.1	-10.1	-0.5	0.0	3.6	15.1
ACC 1 Top	109.0	72.7	0.0	0.0	790.0	-68.9	0.4	-6.1	-2.2	-6.8	0.1	25.5
ACC 2 Bottom	109.0	72.7	0.0	0.0	707.0	-68.0	0.7	-0.8	-2.9	-8.6	0.0	29.5
ACC 2 Duct - Finger 1 A	85.9	62.0	0.0	0.0	774.4	-68.8	-0.4	-4.3	-1.1	0.0	0.0	11.4
ACC 2 Duct - Finger 1 B	85.9	62.0	0.0	0.0	773.2	-68.8	-0.4	-4.1	-1.0	0.0	2.3	13.9
ACC 2 Duct - Finger 1 C	85.9	62.0	0.0	0.0	775.4	-68.8	-0.4	-11.5	-0.7	0.0	0.1	4.6
ACC 2 Duct - Finger 2 A	85.0	62.0	0.0	0.0	786.9	-68.9	-0.4	-4.4	-1.1	0.0	0.0	11.2
ACC 2 Duct - Finger 2 B	85.9	62.0	0.0	0.0	785.7	-68.9	-0.4	-6.2	-0.9	0.0	2.0	11.5
ACC 2 Duct - Finger 2 C	85.9	62.0	0.0	0.0	787.9	-68.9	-0.4	-13.8	-0.6	0.0	0.1	2.2

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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Finger 3 A	86.0	82.0	0.0	0.0	799.4	-69.0	-0.4	-4.7	-1.0	0.0	0.0	10.8
ACC 2 Duct - Finger 3 B	85.9	82.0	0.0	0.0	798.3	-69.0	-0.4	-6.6	-0.9	0.0	2.1	11.0
ACC 2 Duct - Finger 3 C	85.9	82.0	0.0	0.0	800.5	-69.1	-0.4	-12.3	-0.7	0.0	0.0	3.4
ACC 2 Duct - HRH Bypass Bell A	93.8	82.0	0.0	0.0	761.7	-68.6	1.1	-23.6	-0.7	0.0	0.0	1.9
ACC 2 Duct - HRH Bypass Bell B	93.8	82.0	0.0	0.0	761.6	-68.6	1.6	-25.7	-0.9	0.0	0.0	0.1
ACC 2 Duct - HRH Bypass Bell C	93.9	82.0	0.0	0.0	759.9	-68.6	1.3	-23.5	-0.7	0.0	2.7	5.1
ACC 2 Duct - HRH Bypass Bell D	93.6	82.0	0.0	0.0	761.1	-68.6	1.3	-17.7	-0.5	0.0	0.5	3.6
ACC 2 Duct - HRH Bypass Bell E	93.9	82.0	0.0	0.0	763.5	-68.6	1.3	-22.6	-0.7	0.0	2.3	5.6
ACC 2 Duct - HRH Bypass Tube A	82.6	79.0	0.0	0.0	760.5	-68.6	1.3	-18.2	-0.5	0.0	0.0	-3.4
ACC 2 Duct - HRH Bypass Tube B	82.6	79.0	0.0	0.0	760.2	-68.6	1.3	-18.2	-0.5	0.0	0.6	-2.7
ACC 2 Duct - HRH Bypass Tube C	82.6	79.0	0.0	0.0	760.8	-68.6	1.3	-19.6	-0.6	0.0	0.0	-4.9
ACC 2 Duct - HRH Bypass Tube D	82.6	79.0	0.0	0.0	760.5	-68.6	1.4	-18.4	-0.5	0.0	0.0	-3.5
ACC 2 Duct - LF Bypass Bell A	92.8	81.0	0.0	0.0	766.1	-68.7	1.1	-23.2	-0.7	0.0	0.0	1.4
ACC 2 Duct - LF Bypass Bell B	92.8	81.0	0.0	0.0	766.0	-68.7	1.6	-25.7	-0.9	0.0	0.0	-0.9
ACC 2 Duct - LF Bypass Bell C	92.9	81.0	0.0	0.0	764.3	-68.7	1.3	-22.1	-0.6	0.0	1.3	4.1
ACC 2 Duct - LP Bypass Bell D	92.6	81.0	0.0	0.0	765.5	-68.7	1.3	-17.9	-0.5	0.0	0.5	7.4
ACC 2 Duct - LP Bypass Bell E	92.9	81.0	0.0	0.0	767.9	-68.7	1.4	-20.9	-0.6	0.0	0.0	4.0
ACC 2 Duct - LF Bypass Tube A	81.6	78.0	0.0	0.0	765.0	-68.7	1.3	-18.5	-0.5	0.0	0.0	-4.7
ACC 2 Duct - LF Bypass Tube B	81.6	78.0	0.0	0.0	764.6	-68.7	1.3	-18.5	-0.5	0.0	0.0	-4.0
ACC 2 Duct - LP Bypass Tube C	81.6	78.0	0.0	0.0	765.3	-68.7	1.3	-19.6	-0.6	0.0	0.0	-5.8
ACC 2 Duct - LP Bypass Tube D	81.6	78.0	0.0	0.0	764.9	-68.7	1.4	-18.6	-0.5	0.0	0.0	-4.8
ACC 2 Duct - Main A	99.2	82.0	0.0	0.0	748.9	-68.5	0.9	-15.6	-0.5	0.0	0.3	15.8
ACC 2 Duct - Main B	97.6	82.0	0.0	0.0	750.4	-68.5	1.3	-24.4	-0.8	0.0	0.0	5.2
ACC 2 Duct - Main D	97.8	82.0	0.0	0.0	745.8	-68.4	1.3	-13.4	-0.5	0.0	0.5	17.2
ACC 2 Duct - Main E	94.6	82.0	0.0	0.0	748.3	-68.5	1.3	-11.2	-0.5	0.0	0.7	16.4
ACC 2 Duct - Main F	94.2	82.0	0.0	0.0	751.2	-68.5	1.3	-14.3	-0.5	0.0	1.2	13.4
ACC 2 Duct - Main H	99.2	82.0	0.0	0.0	748.8	-68.5	1.6	-24.6	-0.8	0.0	0.4	7.4
ACC 2 Duct - Main M	94.9	82.0	0.0	0.0	782.8	-68.9	1.3	-19.2	-0.5	0.0	0.0	7.6
ACC 2 Duct - Main N	103.5	82.0	0.0	0.0	767.3	-68.7	1.0	-21.7	-0.6	0.0	0.6	14.1
ACC 2 Duct - Main O	102.8	82.0	0.0	0.0	770.3	-68.7	1.3	-18.6	-0.5	0.0	0.3	16.6
ACC 2 Duct - Main P	102.8	82.0	0.0	0.0	769.6	-68.7	1.6	-24.9	-0.8	0.0	0.9	10.9
ACC 2 Duct - Main Q	95.4	82.0	0.0	0.0	755.2	-68.6	1.3	-16.5	-0.5	0.0	0.2	11.3



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Main R	95.2	82.0	0.0	0.0	753.7	-68.5	1.3	-23.9	-0.7	0.0	2.0	5.4
ACC 2 Duct - Main S	102.9	82.0	0.0	0.0	768.9	-68.7	1.3	-24.0	-0.8	0.0	0.3	11.0
ACC 2 Duct - Riser 1 A	90.0	72.0	0.0	0.0	753.3	-68.5	0.1	-7.0	-0.7	0.0	1.4	15.3
ACC 2 Duct - Riser 1 B	90.1	72.0	0.0	0.0	755.4	-68.6	0.1	-14.0	-0.5	0.0	0.2	7.3
ACC 2 Duct - Riser 1 C	90.0	72.0	0.0	0.0	756.4	-68.6	0.1	-18.0	-0.5	0.0	0.0	5.0
ACC 2 Duct - Riser 1 D	90.1	72.0	0.0	0.0	754.3	-68.5	0.1	-7.1	-0.7	0.0	1.4	15.3
ACC 2 Duct - Riser 2 A	90.0	72.0	0.0	0.0	766.1	-68.7	0.1	-10.8	-0.6	0.0	0.8	10.9
ACC 2 Duct - Riser 2 B	90.1	72.0	0.0	0.0	768.2	-68.7	0.1	-15.4	-0.5	0.0	0.2	5.8
ACC 2 Duct - Riser 2 C	90.0	72.0	0.0	0.0	769.2	-68.7	0.1	-17.6	-0.5	0.0	0.0	3.3
ACC 2 Duct - Riser 2 D	90.1	72.0	0.0	0.0	767.2	-68.7	0.1	-11.4	-0.6	0.0	0.7	10.2
ACC 2 Duct - Riser 3 A	90.0	72.0	0.0	0.0	779.1	-68.8	0.1	-11.2	-0.6	0.0	0.9	10.5
ACC 2 Duct - Riser 3 B	90.1	72.0	0.0	0.0	781.1	-68.8	0.1	-16.1	-0.5	0.0	0.3	5.0
ACC 2 Duct - Riser 3 C	90.0	72.0	0.0	0.0	782.1	-68.9	0.1	-17.6	-0.6	0.0	0.0	3.2
ACC 2 Duct - Riser 3 D	90.1	72.0	0.0	0.0	780.1	-68.8	0.1	-13.3	-0.6	0.0	1.0	8.5
ACC 2 Top	109.0	72.7	0.0	0.0	707.5	-68.0	0.3	-5.2	-2.1	-7.2	0.4	27.3
ACHE 1	99.0	72.9	0.0	0.0	751.3	-68.5	2.2	-7.4	-2.2	0.0	0.0	23.1
ACHE 2	99.0	72.9	0.0	0.0	645.5	-67.2	1.8	-5.9	-2.2	0.0	0.8	26.2
Air Process Skid 2	93.0	93.0	0.0	0.0	763.5	-68.6	3.2	-28.0	-4.1	0.0	0.0	-4.5
Air Process Skid 2	93.0	93.0	0.0	0.0	660.2	-67.4	3.0	-26.3	-3.0	0.0	0.0	-0.7
Ammonia Forwarding Pump	93.1	93.1	0.0	0.0	762.2	-68.6	3.1	-7.9	-4.2	0.0	0.1	15.6
Ammonia Injection Skid 1	98.1	98.1	0.0	0.0	714.2	-68.1	3.0	-26.9	-3.0	0.0	2.4	5.6
Ammonia Injection Skid 2	98.1	98.1	0.0	0.0	609.9	-66.7	2.5	-5.2	-5.2	0.0	3.4	26.8
Aux Boiler Building - East Side	88.0	64.3	0.0	3.0	675.2	-67.6	1.2	-4.6	-0.5	0.0	0.0	19.5
Aux Boiler Building - North Side	88.5	64.3	0.0	3.0	686.4	-67.7	1.3	-3.9	-0.5	0.0	0.0	20.6
Aux Boiler Building - Roof	91.9	64.3	0.0	0.0	688.2	-67.7	0.6	-5.5	-0.5	0.0	0.6	19.3
Aux Boiler Building - South Side	86.5	64.3	0.0	3.0	690.1	-67.8	1.2	-10.2	-0.3	0.0	0.3	14.9
Aux Boiler Building - West Side	88.0	64.3	0.0	3.0	701.0	-67.9	1.3	-15.5	-0.3	0.0	3.3	11.9
Aux Boiler Building Vent Louvers - North	86.0	75.2	0.0	3.0	681.9	-67.7	1.9	-2.6	-2.4	0.0	0.0	18.3
Aux Boiler Building Vent Louvers - South	86.0	75.2	0.0	3.0	684.4	-67.8	2.0	-16.0	-0.9	0.0	0.3	6.7
Aux Boiler FD Fan Inlet	100.0	100.0	0.0	0.0	674.3	-67.6	1.5	-5.1	-2.2	0.0	2.5	29.0
Aux Boiler Stack Exhaust	100.0	100.0	0.0	0.0	695.0	-67.8	0.7	0.0	-4.3	0.0	0.0	20.6
Aux Transformer 1 - Side 1	82.0	69.2	0.0	3.0	717.7	-68.1	2.2	-28.8	-1.8	0.0	3.5	-5.9

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Clear River Energy Center - Mean Propagation Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Aux Transformer: 1 - Side 2	82.0	70.2	0.0	3.0	713.8	-68.1	2.2	-25.6	-1.4	0.0	1.9	-6.0
Aux Transformer: 1 - Side 3	82.0	69.2	0.0	3.0	716.0	-68.1	2.2	-25.1	-1.3	0.0	3.2	-4.1
Aux Transformer: 1 - Side 4	82.0	70.2	0.0	3.0	719.9	-68.1	2.2	-26.7	-1.7	0.0	4.6	-4.8
Aux Transformer: 1 - Top	82.0	66.9	0.0	0.0	716.9	-88.1	2.0	-24.8	-1.3	0.0	3.5	-6.7
Aux Transformer: 2 - Side 1	82.0	69.2	0.0	3.0	617.7	-66.8	1.7	-15.8	-1.0	0.0	8.6	11.7
Aux Transformer: 2 - Side 2	82.0	70.2	0.0	3.0	613.7	-66.8	1.7	-8.1	-1.3	0.0	1.0	10.5
Aux Transformer: 2 - Side 3	82.0	69.2	0.0	3.0	615.7	-66.8	1.7	-8.4	-1.4	0.0	3.5	13.6
Aux Transformer: 2 - Side 4	82.0	70.2	0.0	3.0	619.7	-66.8	1.8	-17.2	-1.0	0.0	9.3	11.0
Aux Transformer: 2 - Top	82.0	66.9	0.0	0.0	616.7	-66.8	1.3	-6.0	-1.7	0.0	2.9	11.7
BFW Pump Enclosure 1-Side 1	94.4	76.9	0.0	3.0	758.0	-68.6	1.7	-25.4	-0.7	0.0	0.0	4.4
BFW Pump Enclosure 1-Side 2	97.2	76.9	0.0	3.0	747.2	-68.5	1.7	-25.2	-0.7	0.0	0.3	7.8
BFW Pump Enclosure 1-Side 3	94.4	76.9	0.0	3.0	751.6	-68.5	1.7	-23.3	-0.5	0.0	0.0	6.7
BFW Pump Enclosure 1-Side 4	97.2	76.9	0.0	3.0	762.3	-68.6	1.7	-25.4	-0.7	0.0	0.0	7.2
BFW Pump Enclosure 1-Top	103.5	76.9	0.0	0.0	754.8	-68.5	1.5	-24.1	-0.6	0.0	0.1	11.7
BFW Pump Enclosure 2-Side 1	94.4	76.9	0.0	3.0	654.3	-67.3	1.5	-22.7	-0.5	0.0	0.0	8.4
BFW Pump Enclosure 2-Side 2	97.2	76.9	0.0	3.0	643.1	-67.2	1.5	-22.3	-0.4	0.0	0.8	12.7
BFW Pump Enclosure 2-Side 3	94.4	76.9	0.0	3.0	646.8	-67.2	1.5	-23.5	-0.5	0.0	0.0	16.9
BFW Pump Enclosure 2-Side 4	97.2	76.9	0.0	3.0	657.8	-67.4	1.6	-25.3	-0.6	0.0	0.0	8.5
BFW Pump Enclosure 2-Top	103.4	76.9	0.0	0.0	650.5	-67.3	1.1	-20.3	-0.4	0.0	0.8	17.4
Condensate Equipment Bldg 1 - East Side	77.7	56.7	0.0	3.0	745.5	-88.4	1.9	-7.0	-0.6	0.0	0.0	6.7
Condensate Equipment Bldg 1 - North Side	75.2	56.7	0.0	3.0	747.4	-88.5	1.9	-18.8	-0.3	0.0	0.7	-6.8
Condensate Equipment Bldg 1 - Roof	78.0	51.7	0.0	0.0	752.7	-68.5	1.6	-7.8	-0.6	0.0	0.1	2.8
Condensate Equipment Bldg 1 - South Side	75.2	56.7	0.0	3.0	758.0	-88.6	1.9	-15.2	-0.4	0.0	0.5	-3.6
Condensate Equipment Bldg 1 - West Side	77.7	56.7	0.0	3.0	759.8	-88.6	1.9	-18.3	-0.4	0.0	1.1	-3.5
Condensate Equipment Bldg 2 - East Side	77.7	56.7	0.0	3.0	682.8	-67.4	1.6	-6.0	-0.6	0.0	0.0	8.3
Condensate Equipment Bldg 2 - North Side	75.2	56.7	0.0	3.0	664.0	-67.4	1.6	-6.1	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 2 - Roof	78.0	51.7	0.0	0.0	669.8	-67.5	1.0	-5.6	-0.5	0.0	0.0	5.4
Condensate Equipment Bldg 2 - South Side	75.2	56.7	0.0	3.0	675.9	-67.6	1.7	-10.2	-0.3	0.0	0.0	1.7
Condensate Equipment Bldg 2 - West Side	77.7	56.7	0.0	3.0	676.8	-67.6	1.7	-13.0	-0.3	0.0	0.0	1.5
CTG 1 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	739.2	-68.4	3.2	-6.7	-5.7	0.0	0.0	26.2
CTG 2 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	637.2	-67.1	2.9	-7.5	-4.5	0.0	0.0	27.6
CTG Air Inlet 1	106.2	82.9	0.0	0.0	769.2	-68.7	3.2	-26.9	-8.4	0.0	0.1	5.5



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
CTG Air Inlet 2	106.2	82.9	0.0	0.0	666.4	-67.5	2.8	-26.1	-7.1	0.0	0.2	8.4
CTG Air Inlet Duct 1 - North	99.9	84.4	0.0	0.0	750.4	-68.5	2.7	-25.3	-2.8	0.0	1.3	7.3
CTG Air Inlet Duct 1 - South	99.9	84.4	0.0	0.0	752.0	-68.5	2.7	-26.1	-3.3	0.0	1.0	5.7
CTG Air Inlet Duct 1 - Top	99.9	83.3	0.0	0.0	751.3	-68.5	2.4	-26.6	-3.7	0.0	0.1	3.6
CTG Air Inlet Duct 2 - North	99.9	84.3	0.0	0.0	647.7	-67.2	2.2	-23.3	-2.2	0.0	1.0	10.3
CTG Air Inlet Duct 2 - South	99.9	84.3	0.0	0.0	649.7	-67.2	2.2	-25.2	-2.6	0.0	0.0	7.1
CTG Air Inlet Duct 2 - Top	99.9	83.2	0.0	0.0	649.4	-67.2	2.0	-26.7	-3.6	0.0	0.9	5.3
CTG Building 1 - East Facade	95.1	64.7	0.0	3.0	718.8	-68.1	0.8	-5.0	-0.3	0.0	0.0	25.4
CTG Building 1 - North Facade	94.0	64.7	0.0	3.0	727.6	-68.2	0.8	-6.7	-0.3	0.0	0.0	22.6
CTG Building 1 - Roof	89.9	59.7	0.0	0.0	733.1	-68.3	-0.1	-4.7	-0.4	0.0	0.2	16.6
CTG Building 1 - West Facade	95.1	64.7	0.0	3.0	746.3	-68.5	0.8	-17.6	-0.3	0.0	0.0	12.6
CTG Building 1 Vent Louvers - East	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-6.6	-2.6	0.0	0.0	17.0
CTG Building 1 Vent Louvers - North	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-14.1	-1.1	0.0	0.2	11.2
CTG Building 1 Vent Louvers - West	70.1	57.6	0.0	3.0	742.9	-68.4	1.3	-17.2	-0.2	0.0	0.0	-11.4
CTG Building 2 - East Facade	95.1	64.7	0.0	3.0	616.4	-66.8	0.5	-1.3	-0.3	0.0	0.0	30.2
CTG Building 2 - North Facade	94.0	64.7	0.0	3.0	624.3	-66.9	0.6	-1.9	-0.3	0.0	0.0	28.5
CTG Building 2 - Roof	89.9	59.7	0.0	0.0	630.5	-67.0	0.0	-4.6	-0.3	0.0	0.0	17.9
CTG Building 2 - West Facade	95.1	64.7	0.0	3.0	643.6	-67.2	0.5	-14.5	-0.2	0.0	0.0	16.7
CTG Building 2 Vent Louvers - East	89.6	77.0	0.0	3.0	617.4	-66.8	1.5	-0.1	-5.4	0.0	0.0	21.8
CTG Building 2 Vent Louvers - North	89.6	77.0	0.0	3.0	616.4	-66.8	1.5	-0.1	-5.4	0.0	1.4	23.2
CTG Building 2 Vent Louvers - West	89.6	77.0	0.0	3.0	639.7	-67.1	1.5	-20.4	-1.6	0.0	0.0	4.9
Demin Water Pump	93.1	93.1	0.0	0.0	675.5	-67.6	3.1	-24.9	-2.0	0.0	0.5	2.2
Duct Burner Skid 1	95.0	95.0	0.0	0.0	717.4	-68.1	3.0	-25.2	-2.1	0.0	2.8	5.4
Duct Burner Skid 2	95.0	95.0	0.0	0.0	613.7	-66.8	2.5	-3.6	-3.8	0.0	1.8	25.2
Emergency Diesel Generator - Side 1	8.2	-7.7	0.0	3.0	683.7	-67.7	3.3	-28.3	-3.9	0.0	2.1	-83.3
Emergency Diesel Generator - Side 2	8.2	-7.8	0.0	3.0	680.2	-67.6	3.3	-28.2	-3.8	0.0	1.2	-83.9
Emergency Diesel Generator - Top	8.2	-8.6	0.0	0.0	682.0	-67.7	3.1	-27.5	-3.7	0.0	2.8	-84.8
Excitation Transformer 1	80.0	80.0	0.0	0.0	718.7	-68.1	2.2	-24.5	-1.3	0.0	2.4	9.6
Excitation Transformer 2	80.0	80.0	0.0	0.0	617.1	-66.8	1.6	-5.3	-2.2	0.0	0.0	9.6
Fire Pump Building - Roof	-4.1	-23.3	0.0	0.0	630.7	-67.0	1.2	-5.5	-0.5	0.0	0.0	-76.0
Fire Pump Building - Side 1	-5.7	-23.3	0.0	3.0	633.9	-67.0	1.8	-11.8	-0.3	0.0	0.0	-80.1
Fire Pump Building - Side 2	-6.5	-23.3	0.0	3.0	631.3	-67.0	1.8	-6.6	-0.4	0.0	0.0	-77.7

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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Fire Pump Building - Side 3	-5.7	-23.3	0.0	3.0	627.3	-86.9	1.7	-6.4	-0.5	0.0	0.0	-74.9
Fire Pump Building - Side 4	-8.5	-23.3	0.0	3.0	630.0	-87.0	1.8	-6.4	-0.5	0.0	0.0	-77.7
Fuel Gas Dewpoint Heater	102.2	85.3	0.0	0.0	795.5	-89.0	3.9	-28.8	-15.5	0.0	0.0	-7.2
Fuel Gas Metering and Regulating Station	93.0	93.0	0.0	0.0	798.2	-89.0	3.9	-28.7	-8.8	0.0	0.0	-9.7
Fuel Gas Performance Heater 1	93.0	93.0	0.0	0.0	645.0	-87.2	3.0	-26.6	-3.1	0.0	0.0	-1.0
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	748.2	-88.5	3.2	-28.0	-4.1	0.0	0.0	-4.4
Gas Aftercooler 1	101.0	84.0	0.0	0.0	806.0	-88.1	3.2	-27.6	-3.9	0.0	0.0	3.6
Gas Aftercooler 2	101.0	83.9	0.0	0.0	809.0	-88.2	3.2	-27.7	-4.0	0.0	0.0	3.4
Gas Compressor Bldg Louvers - E	105.7	98.0	0.0	3.0	784.3	-88.9	2.9	-27.1	-3.1	0.0	0.0	12.6
Gas Compressor Bldg Louvers - N	105.7	98.0	0.0	3.0	790.8	-89.0	2.9	-27.3	-3.3	0.0	0.0	12.0
Gas Compressor Bldg Louvers - S	105.7	98.0	0.0	3.0	791.0	-89.0	2.9	-27.6	-3.6	0.0	0.0	11.6
Gas Compressor Bldg Louvers - W	105.7	98.0	0.0	3.0	797.4	-89.0	2.9	-27.8	-3.6	0.0	0.0	11.5
Gas Compressor Building - East Side	99.1	76.7	0.0	3.0	784.1	-88.9	1.7	-16.1	-0.3	0.0	0.0	18.5
Gas Compressor Building - North Side	97.5	76.7	0.0	3.0	788.6	-88.9	1.7	-16.6	-0.3	0.0	0.0	16.4
Gas Compressor Building - Roof	101.0	76.7	0.0	0.0	791.0	-89.0	1.2	-17.7	-0.4	0.0	0.0	15.1
Gas Compressor Building - South Side	97.5	76.7	0.0	3.0	793.2	-89.0	1.7	-19.5	-0.3	0.0	0.0	13.4
Gas Compressor Building - West Side	99.1	76.7	0.0	3.0	797.6	-89.0	1.7	-21.3	-0.4	0.0	0.0	13.1
GSU 1 - Side 1	94.0	75.7	0.0	3.0	723.0	-88.2	2.1	-25.4	-1.7	0.0	1.4	4.2
GSU 1 - Side 2	94.0	78.0	0.0	3.0	714.6	-88.1	2.1	-25.1	-1.5	0.0	0.2	4.7
GSU 1 - Side 3	94.0	75.7	0.0	3.0	720.1	-88.1	2.1	-26.3	-1.6	0.0	1.5	4.6
GSU 1 - Side 4	94.0	78.0	0.0	3.0	728.5	-88.2	2.1	-26.5	-1.8	0.0	2.5	5.2
GSU 1 - Top	94.0	72.9	0.0	0.0	721.4	-88.2	1.8	-23.9	-1.3	0.0	1.7	4.2
GSU 2 - Side 1	94.0	75.7	0.0	3.0	623.4	-86.9	1.6	-13.1	-1.2	0.0	0.3	17.7
GSU 2 - Side 2	94.0	78.0	0.0	3.0	615.0	-86.8	1.2	-1.9	-2.6	0.0	0.0	27.0
GSU 2 - Side 3	94.0	75.7	0.0	3.0	620.1	-86.8	1.6	-6.8	-2.1	0.0	0.5	23.3
GSU 2 - Side 4	94.0	78.0	0.0	3.0	628.6	-87.0	1.7	-18.3	-1.0	0.0	2.0	14.4
GSU 2 - Top	94.0	72.9	0.0	0.0	621.5	-86.9	1.1	-6.3	-1.7	0.0	1.7	22.0
HRSG 1 - Body - Side 1	97.0	66.6	0.0	3.0	730.9	-88.3	0.7	-16.6	-0.4	0.0	0.0	15.5
HRSG 1 - Body - Side 2	97.0	66.6	0.0	3.0	720.4	-88.1	0.7	-4.2	-0.7	0.0	0.0	27.8
HRSG 1 - Exhaust Stack	102.4	102.4	0.0	0.0	724.6	-88.2	2.0	0.0	-0.4	-3.6	0.0	32.3
HRSG 1 - Piping and Valves	98.5	80.0	0.0	0.0	744.6	-88.4	0.5	-17.1	-0.5	0.0	0.2	13.1
HRSG 1 - Stack Walls - Side 1	85.6	44.8	0.0	3.0	721.3	-88.2	2.0	-0.8	-0.1	0.0	0.0	1.5

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Source	PWL dB(A)	PWLunit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HRSG 1 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	719.5	-68.1	2.0	-1.5	-0.2	0.0	0.0	0.8
HRSG 1 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	719.1	-68.1	2.0	-3.4	-0.2	0.0	0.0	-1.2
HRSG 1 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	720.4	-68.1	2.0	-3.7	-0.2	0.0	0.0	-1.5
HRSG 1 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	722.6	-68.2	2.0	-4.4	-0.2	0.0	0.0	-2.2
HRSG 1 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	724.4	-68.2	2.0	-6.2	-0.1	0.0	0.0	-3.9
HRSG 1 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	724.7	-68.2	2.0	-6.9	-0.1	0.0	0.0	-4.7
HRSG 1 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	723.5	-68.2	2.0	-8.5	-0.2	0.0	0.0	-6.3
HRSG 1 - T1 - Side 1	96.6	81.2	0.0	3.0	734.5	-68.3	1.7	-18.1	-0.4	0.0	0.5	15.1
HRSG 1 - T1 - Side 2	96.6	81.2	0.0	3.0	727.2	-68.2	1.6	-11.1	-0.4	0.0	1.0	22.6
HRSG 1 - T1 - Top	96.6	82.8	0.0	0.0	731.2	-68.3	1.0	-13.0	-0.4	0.0	2.1	18.0
HRSG 1 - T2 - Side 1	96.6	76.2	0.0	3.0	734.5	-68.3	1.0	-17.5	-0.4	0.0	0.1	14.5
HRSG 1 - T2 - Side 2	96.6	76.2	0.0	3.0	725.7	-68.2	1.0	-8.3	-0.4	0.0	0.0	23.8
HRSG 1 - T2 - Top	96.6	80.4	0.0	0.0	730.5	-68.3	-0.1	-7.5	-0.5	0.0	0.3	20.6
HRSG 2 - Body - Side 1	97.0	66.6	0.0	3.0	626.6	-66.9	0.4	-15.8	-0.3	0.0	0.0	17.5
HRSG 2 - Body - Side 2	97.0	66.6	0.0	3.0	616.2	-66.8	0.5	-1.3	-0.7	0.0	0.0	31.8
HRSG 2 - Exhaust Stack	102.4	102.4	0.0	0.0	620.3	-66.8	1.7	0.0	-0.3	-3.6	0.0	33.4
HRSG 2 - Piping and Valves	98.5	80.1	0.0	0.0	640.8	-67.1	0.2	-13.2	-0.5	0.0	2.7	20.6
HRSG 2 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	616.7	-66.8	1.9	-0.8	-0.1	0.0	0.0	2.7
HRSG 2 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	614.9	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.3
HRSG 2 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	614.4	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	615.5	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	617.8	-66.8	1.9	-4.4	-0.1	0.0	0.0	-0.9
HRSG 2 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	619.6	-66.8	1.9	-6.1	-0.1	0.0	0.0	-2.6
HRSG 2 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	620.0	-66.8	1.9	-7.0	-0.1	0.0	0.0	-3.5
HRSG 2 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	618.9	-66.8	1.9	-7.8	-0.1	0.0	0.0	-4.3
HRSG 2 - T1 - Side 1	96.6	81.2	0.0	3.0	631.2	-67.0	1.0	-10.7	-0.2	0.0	0.5	23.2
HRSG 2 - T1 - Side 2	96.6	81.2	0.0	3.0	624.0	-66.9	1.2	-3.9	-0.9	0.0	2.0	31.2
HRSG 2 - T1 - Top	96.6	82.8	0.0	0.0	627.9	-66.9	0.7	-5.4	-0.4	0.0	2.4	27.0
HRSG 2 - T2 - Side 1	96.6	76.2	0.0	3.0	631.1	-67.0	0.6	-12.3	-0.3	0.0	0.1	20.8
HRSG 2 - T2 - Side 2	96.6	76.2	0.0	3.0	622.3	-66.9	0.7	-1.8	-0.7	0.0	0.7	31.6
HRSG 2 - T2 - Top	96.6	80.4	0.0	0.0	627.4	-66.9	0.0	-6.0	-0.6	0.0	0.7	23.7
HRSG Rectric Pump 1	93.0	93.0	0.0	0.0	711.2	-68.0	3.1	-26.3	-2.6	0.0	8.1	7.3



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Clear River Energy Center - Mean Propagation Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HRSR Recirc Pump 2	93.0	93.0	0.0	0.0	606.4	-66.6	2.8	-7.3	-3.6	0.0	2.2	20.6
Isolation Transformer 1	80.0	80.0	0.0	0.0	703.7	-67.9	2.1	-25.4	-1.3	0.0	8.5	-3.9
Isolation Transformer 2	80.0	80.0	0.0	0.0	601.3	-66.6	1.2	-2.9	-2.8	0.0	2.4	11.4
Rooftop Vent Fan - Admin 1	87.8	87.8	0.0	0.0	569.5	-66.1	2.7	-4.4	-4.9	0.0	0.0	15.2
Rooftop Vent Fan - Admin 2	87.8	87.8	0.0	0.0	612.2	-66.7	2.8	-7.5	-2.7	0.0	0.0	13.7
Rooftop Vent Fan - Admin 3	87.8	87.8	0.0	0.0	589.4	-66.4	2.8	-7.5	-2.7	0.0	0.0	13.9
Rooftop Vent Fan - Admin 4	87.8	87.8	0.0	0.0	614.6	-66.8	2.8	-7.6	-2.8	0.0	1.4	14.9
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	670.7	-67.5	2.8	-2.0	-5.1	0.0	0.0	16.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	753.2	-68.5	3.0	-6.0	-2.7	0.0	0.0	13.6
Rooftop Vent Fan - CTG Bldg 1	87.8	87.8	0.0	0.0	735.3	-68.3	3.0	-6.8	-2.7	0.0	0.0	12.9
Rooftop Vent Fan - CTG Bldg 2	87.8	87.8	0.0	0.0	724.3	-68.2	2.9	-6.5	-2.7	0.0	0.0	13.3
Rooftop Vent Fan - CTG Bldg 3	87.8	87.8	0.0	0.0	728.3	-68.2	2.9	-3.1	-3.4	0.0	0.0	16.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.8	0.0	0.0	632.6	-67.0	2.7	-7.4	-2.9	0.0	0.0	13.2
Rooftop Vent Fan - CTG Bldg 5	87.8	87.8	0.0	0.0	627.4	-66.9	2.7	-0.7	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - CTG Bldg 6	87.8	87.8	0.0	0.0	622.8	-66.9	2.7	-0.8	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.8	0.0	0.0	790.3	-68.9	3.1	-17.9	-1.3	0.0	0.0	2.7
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.8	0.0	0.0	791.8	-69.0	3.1	-18.6	-1.5	0.0	0.0	1.9
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.8	0.0	0.0	793.1	-69.0	3.1	-18.3	-1.5	0.0	0.0	2.2
Rooftop Vent Fan - STG Bldg 1	87.8	87.8	0.0	0.0	658.3	-67.4	2.8	-7.5	-2.9	0.0	0.0	12.8
Rooftop Vent Fan - STG Bldg 2	87.8	87.8	0.0	0.0	634.0	-67.0	2.7	-0.7	-4.1	0.0	0.0	18.7
Rooftop Vent Fan - STG Bldg 3	87.8	87.8	0.0	0.0	645.9	-67.2	2.7	-7.5	-2.9	0.0	0.0	12.9
Rooftop Vent Fan - STG Bldg 4	87.8	87.8	0.0	0.0	735.2	-68.3	2.9	-7.2	-2.9	0.0	0.0	12.3
Rooftop Vent Fan - STG Bldg 5	87.8	87.8	0.0	0.0	758.9	-68.6	3.0	-7.8	-3.1	0.0	0.0	11.3
Rooftop Vent Fan - STG Bldg 6	87.8	87.8	0.0	0.0	746.0	-68.4	3.0	-7.1	-2.8	0.0	0.0	12.3
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.8	0.0	0.0	700.5	-67.9	3.0	-7.7	-3.0	0.0	0.0	12.1
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.8	0.0	0.0	680.5	-67.6	3.0	-7.1	-2.7	0.0	0.0	13.3
Safety Vent	28.0	29.0	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-8.2	0.7	-51.9
Scanner Cooling Air Blower 1	93.1	93.1	0.0	0.0	728.1	-68.2	3.2	-5.0	-3.8	0.0	0.0	19.2
Scanner Cooling Air Blower 2	93.1	93.1	0.0	0.0	624.3	-66.9	2.9	-0.1	-4.5	0.0	0.0	24.5
Service Water Pump	93.1	93.1	0.0	0.0	662.7	-67.4	3.0	-26.9	-2.9	0.0	0.0	-0.7
Startup Vent - Aux Boiler Blowdown	114.2	114.2	0.0	0.0	680.1	-67.6	1.3	0.0	-8.4	-8.0	0.0	31.5
Startup Vent - Aux Boiler Startup	114.2	114.2	0.0	0.0	683.5	-67.7	1.3	0.0	-8.4	-8.0	0.0	31.4



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Clear River Energy Center - Mean Propagation Typical Rapid Startup Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Startup Vent - HRSG Blowdown 1	114.2	114.2	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-8.2	0.7	33.2
Startup Vent - HRSG Blowdown 2	114.2	114.2	0.0	0.0	713.7	-68.1	1.3	0.0	-8.5	-7.8	0.6	31.7
Startup Vent - Steam Turbine Drains Tank	114.2	114.2	0.0	0.0	653.9	-67.3	2.6	-0.1	-8.6	-8.6	0.0	32.2
Steam Turbine Bldg 1 - East Facade	92.4	64.9	0.0	3.0	726.9	-68.2	1.2	-7.6	-0.3	0.0	0.0	20.5
Steam Turbine Bldg 1 - North Facade	90.7	64.9	0.0	3.0	757.1	-68.6	1.2	-14.8	-0.3	0.0	0.0	11.2
Steam Turbine Bldg 1 - Roof	88.8	59.9	0.0	0.0	746.8	-68.5	0.2	-6.2	-0.5	0.0	0.2	14.1
Steam Turbine Bldg 1 - South Facade	95.7	64.9	0.0	3.0	748.9	-68.5	1.2	-15.0	-0.2	0.0	0.0	16.3
Steam Turbine Bldg 1 - West Facade	92.4	64.9	0.0	3.0	765.7	-68.7	1.2	-18.3	-0.3	0.0	0.0	9.4
Steam Turbine Bldg 2 - East Facade	90.7	64.9	0.0	3.0	626.1	-66.9	0.9	-1.0	-0.4	0.0	0.0	28.0
Steam Turbine Bldg 2 - North Facade	88.8	59.9	0.0	0.0	655.2	-67.3	1.0	-10.1	-0.2	0.0	0.0	17.0
Steam Turbine Bldg 2 - Roof	95.7	64.9	0.0	3.0	645.7	-67.2	0.2	-4.9	-0.5	0.0	0.0	16.4
Steam Turbine Bldg 2 - South Facade 1	92.4	64.9	0.0	3.0	647.9	-67.2	0.9	-9.2	-0.2	0.0	0.1	23.0
Steam Turbine Bldg 2 - West Facade	89.3	76.8	0.0	3.0	664.1	-67.4	1.0	-16.7	-0.2	0.0	0.0	12.0
STG Building 1 Vent Louvers - East	89.3	76.8	0.0	3.0	726.6	-68.2	1.4	-14.1	-1.0	0.0	0.0	10.4
STG Building 1 Vent Louvers - South 1	89.3	76.8	0.0	3.0	758.9	-68.6	1.5	-21.6	-1.4	0.0	0.0	2.2
STG Building 1 Vent Louvers - South 2	89.3	76.8	0.0	3.0	737.1	-68.3	1.4	-20.4	-1.3	0.0	0.0	3.7
STG Building 1 Vent Louvers - West	89.3	76.8	0.0	3.0	765.8	-68.7	1.5	-24.0	-1.8	0.0	0.7	0.0
STG Building 2 Vent Louvers - East	89.3	76.8	0.0	3.0	625.6	-66.9	1.0	0.0	-3.0	0.0	0.0	23.5
STG Building 2 Vent Louvers - South 1	89.3	76.8	0.0	3.0	657.9	-67.4	1.1	-17.2	-1.1	0.0	0.0	7.8
STG Building 2 Vent Louvers - South 2	89.3	76.8	0.0	3.0	636.5	-67.1	1.1	-13.2	-1.2	0.0	0.0	12.0
STG Building 2 Vent Louvers - West	102.0	90.9	0.0	0.0	664.2	-67.4	1.2	-23.4	-1.5	0.0	0.0	1.1
STW Heat Exchanger 1	102.0	90.9	0.0	0.0	747.9	-68.5	3.1	-28.0	-4.2	0.0	0.0	4.5
STW Heat Exchanger 2	93.1	93.1	0.0	0.0	645.2	-67.2	2.8	-26.0	-3.1	0.0	0.0	8.5
Waste Water Pump	78.9	56.7	0.0	0.0	669.7	-67.5	3.1	-25.8	-2.3	0.0	0.0	0.5
Water Treatment Building - East Side	83.3	56.7	0.0	3.0	660.8	-67.4	1.5	-6.1	-0.5	0.0	0.0	9.5
Water Treatment Building - North Side	86.4	56.7	0.0	0.0	684.3	-67.7	1.5	-4.5	-0.5	0.0	0.0	15.1
Water Treatment Building - Roof	83.3	56.7	0.0	0.0	685.7	-67.7	0.9	-5.6	-0.6	0.0	0.0	13.5
Water Treatment Building - South Side	78.9	56.7	0.0	3.0	684.8	-67.7	1.5	-14.9	-0.3	0.0	0.0	4.8
Water Treatment Building - West Side	90.0	78.0	0.0	3.0	711.6	-68.0	1.6	-15.1	-0.3	0.0	0.0	0.0
WTB Ventilation Louvers - North Side	90.0	78.0	0.0	3.0	679.3	-67.6	2.6	-5.2	-3.1	0.0	0.0	19.6
WTB Ventilation Louvers - South Side	90.0	78.0	0.0	3.0	693.0	-67.8	2.6	-22.9	-2.1	0.0	0.0	2.9



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Typical Shutdown

**Clear River Energy Center - Receiver Sound Levels
Typical Shutdown Analysis - A-Weight - ISO9613**

Name	SPL dB(A)
M1 - Wallum Lake Road	45.1
M2 - Jackson Schoolhouse Road (East)	42.8
M3 - Doe Crossing Drive	40.7
M4 - Buck Hill Road	41.4
M5 - Jackson Schoolhouse Road (South)	36.2



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**Clear River Energy Center - Receiver Spectra
Typical Shutdown Analysis - A-Weight - ISO9613**

31Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver M1 - Wallum Lake Road								
63.3	62.7	56.0	47.3	39.2	35.8	33.0	17.5	-37.8
Receiver M2 - Jackson Schoolhouse Road (East)								
62.8	61.4	52.9	45.2	38.5	33.1	27.7	8.5	
Receiver M3 - Doe Crossing Drive								
58.8	58.5	51.1	44.1	35.5	30.8	24.3	-6.6	
Receiver M4 - Buck Hill Road								
59.8	59.9	51.5	44.4	36.3	32.3	23.7	-12.5	
Receiver M5 - Jackson Schoolhouse Road (South)								
56.7	56.0	46.8	39.6	30.6	23.4	14.1	-29.8	



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Clear River Energy Center - Source List Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 1 Duct - Finger 1 A	75.9	52.00	Area	0	247.24	93.5	89.2	85.1	79.7	74.3	64.0	58.8	48.1	-29.9
ACC 1 Duct - Finger 1 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - Finger 1 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - Finger 2 A	76.0	52.00	Area	0	249.06	93.5	89.3	85.2	79.7	74.3	64.1	58.9	48.1	-29.8
ACC 1 Duct - Finger 2 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - Finger 2 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - Finger 3 A	76.0	52.00	Area	0	250.50	93.5	89.3	85.2	79.7	74.3	64.1	58.9	48.1	-29.8
ACC 1 Duct - Finger 3 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - Finger 3 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 1 Duct - HRH Bypass Bell A	83.8	72.00	Area	0	15.17	101.3	97.1	93.0	87.5	82.1	71.9	66.7	55.9	-22.0
ACC 1 Duct - HRH Bypass Bell B	83.8	72.00	Area	0	15.18	101.3	97.1	93.0	87.5	82.1	71.9	66.7	55.9	-22.0
ACC 1 Duct - HRH Bypass Bell C	83.9	72.00	Area	0	15.37	101.4	97.2	93.1	87.6	82.2	72.0	66.8	56.0	-21.9
ACC 1 Duct - HRH Bypass Bell D	83.6	72.00	Area	0	14.54	101.2	96.9	92.8	87.3	82.0	71.7	66.5	55.7	-22.2
ACC 1 Duct - HRH Bypass Bell E	83.9	72.00	Area	0	15.34	101.4	97.1	93.1	87.6	82.2	72.0	66.8	56.0	-21.9
ACC 1 Duct - HRH Bypass Tube A	72.6	69.00	Area	0	2.28	90.1	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 1 Duct - HRH Bypass Tube B	72.6	69.00	Area	0	2.29	90.1	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 1 Duct - HRH Bypass Tube C	72.6	69.00	Area	0	2.29	90.1	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 1 Duct - HRH Bypass Tube D	72.6	69.00	Area	0	2.28	90.1	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 1 Duct - LP Bypass Bell A	82.8	71.00	Area	0	15.17	100.3	96.1	92.0	86.5	81.1	70.9	65.7	54.9	-23.0
ACC 1 Duct - LP Bypass Bell B	82.8	71.00	Area	0	15.18	100.3	96.1	92.0	86.5	81.1	70.9	65.7	54.9	-23.0
ACC 1 Duct - LP Bypass Bell C	82.9	71.00	Area	0	15.37	100.4	96.2	92.1	86.6	81.2	71.0	65.8	55.0	-22.9
ACC 1 Duct - LP Bypass Bell D	82.6	71.00	Area	0	14.54	100.2	95.9	91.8	86.3	81.0	70.7	65.5	54.7	-23.2
ACC 1 Duct - LP Bypass Bell E	82.9	71.00	Area	0	15.34	100.4	96.1	92.1	86.6	81.2	71.0	65.8	55.0	-22.9
ACC 1 Duct - LP Bypass Tube A	71.6	68.00	Area	0	2.30	89.2	84.9	80.8	75.3	69.9	59.7	54.5	43.7	-34.2
ACC 1 Duct - LP Bypass Tube B	71.6	68.00	Area	0	2.30	89.2	84.9	80.8	75.3	69.9	59.7	54.5	43.7	-34.2
ACC 1 Duct - LP Bypass Tube C	71.6	68.00	Area	0	2.30	89.2	84.9	80.8	75.3	69.9	59.7	54.5	43.7	-34.2
ACC 1 Duct - LP Bypass Tube D	71.6	68.00	Area	0	2.30	89.2	84.9	80.8	75.3	69.9	59.7	54.5	43.7	-34.2
ACC 1 Duct - Main A	83.4	72.00	Area	0	136.57	110.9	106.6	102.5	97.1	91.7	81.4	76.2	65.5	-12.4
ACC 1 Duct - Main B	87.7	72.00	Area	0	37.17	105.2	101.0	96.9	91.4	86.0	75.8	70.6	59.8	-18.1
ACC 1 Duct - Main C	91.1	72.00	Area	0	80.99	108.6	104.4	100.3	94.8	89.4	79.2	74.0	63.2	-14.7
ACC 1 Duct - Main D	87.7	72.00	Area	0	37.41	105.3	101.0	96.9	91.5	86.1	75.8	70.6	59.9	-18.1
ACC 1 Duct - Main E	85.0	72.00	Area	0	19.86	102.5	98.3	94.2	88.7	83.3	73.1	67.9	57.1	-20.8



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Clear River Energy Center - Source List Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Duct - Main F	84.6	72.00	Area	0	18.21	102.1	97.9	93.8	88.3	82.9	72.7	67.5	56.7	-21.2
ACC 1 Duct - Main G	91.1	72.00	Area	0	81.62	108.7	104.4	100.3	94.8	89.4	79.2	74.0	63.2	-14.7
ACC 1 Duct - Main H	93.4	72.00	Area	0	136.57	110.9	106.6	102.5	97.1	91.7	81.4	76.2	65.5	-12.4
ACC 1 Duct - Main M	84.9	72.00	Area	0	19.41	102.4	98.2	94.1	88.6	83.2	73.0	67.8	57.0	-20.9
ACC 1 Duct - Main N	93.5	72.00	Area	0	142.12	111.1	106.8	102.7	97.3	91.9	81.6	76.4	65.6	-12.3
ACC 1 Duct - Main O	92.8	72.00	Area	0	120.75	110.4	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 1 Duct - Main P	92.8	72.00	Area	0	121.31	110.4	106.2	102.1	96.6	91.2	81.0	75.8	65.0	-13.0
ACC 1 Duct - Main Q	92.9	72.00	Area	0	121.95	110.4	106.2	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 1 Duct - Main R	85.4	72.00	Area	0	21.64	102.9	98.6	94.5	89.1	83.7	73.4	68.2	57.5	-20.4
ACC 1 Duct - Main S	85.2	72.00	Area	0	21.04	102.8	98.5	94.4	89.0	83.6	73.3	68.1	57.4	-20.6
ACC 1 Duct - Riser 1 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 1 B	80.1	62.00	Area	0	64.21	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Duct - Riser 1 C	80.0	62.00	Area	0	63.57	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 1 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Duct - Riser 2 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 2 B	80.1	62.00	Area	0	64.21	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Duct - Riser 2 C	80.0	62.00	Area	0	63.56	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 2 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Duct - Riser 3 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 3 B	80.1	62.00	Area	0	64.20	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Duct - Riser 3 C	80.0	62.00	Area	0	63.58	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 1 Duct - Riser 3 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 1 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Duct - Finger 1 A	75.9	52.00	Area	0	247.24	93.5	89.2	85.1	79.7	74.3	64.0	58.8	48.1	-29.9
ACC 2 Duct - Finger 1 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 2 Duct - Finger 1 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 2 Duct - Finger 2 A	76.0	52.00	Area	0	249.06	93.5	89.3	85.2	79.7	74.3	64.1	58.9	48.1	-29.8
ACC 2 Duct - Finger 2 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 2 Duct - Finger 2 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 2 Duct - Finger 3 A	76.0	52.00	Area	0	250.50	93.5	89.3	85.2	79.7	74.3	64.1	58.9	48.1	-29.8
ACC 2 Duct - Finger 3 B	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9
ACC 2 Duct - Finger 3 C	75.9	52.00	Area	0	245.91	93.4	89.2	85.1	79.6	74.2	64.0	58.8	48.0	-29.9

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Clear River Energy Center - Source List Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	LW'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - HRH Bypass Bell A	83.8	72.00	Area	0	15.18	101.3	97.1	93.0	87.5	82.1	71.9	66.7	55.9	-22.0
ACC 2 Duct - HRH Bypass Bell B	83.8	72.00	Area	0	15.18	101.3	97.1	93.0	87.5	82.1	71.9	66.7	55.9	-22.0
ACC 2 Duct - HRH Bypass Bell C	83.9	72.00	Area	0	15.37	101.4	97.2	93.1	87.6	82.2	72.0	66.8	56.0	-21.9
ACC 2 Duct - HRH Bypass Bell D	83.6	72.00	Area	0	14.54	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.7	-22.2
ACC 2 Duct - HRH Bypass Bell E	83.9	72.00	Area	0	15.34	101.4	97.1	93.1	87.6	82.2	72.0	66.8	56.0	-21.9
ACC 2 Duct - HRH Bypass Tube A	72.6	69.00	Area	0	2.30	90.2	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 2 Duct - HRH Bypass Tube B	72.6	69.00	Area	0	2.30	90.2	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 2 Duct - HRH Bypass Tube C	72.6	69.00	Area	0	2.30	90.2	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 2 Duct - HRH Bypass Tube D	72.6	69.00	Area	0	2.30	90.2	85.9	81.8	76.3	70.9	60.7	55.5	44.7	-33.2
ACC 2 Duct - LP Bypass Bell A	82.8	71.00	Area	0	15.18	100.3	96.1	92.0	86.5	81.1	70.9	65.7	54.9	-23.0
ACC 2 Duct - LP Bypass Bell B	82.8	71.00	Area	0	15.18	100.3	96.1	92.0	86.5	81.1	70.9	65.7	54.9	-23.0
ACC 2 Duct - LP Bypass Bell C	82.9	71.00	Area	0	15.37	100.4	96.2	92.1	86.6	81.2	71.0	65.8	55.0	-22.9
ACC 2 Duct - LP Bypass Bell D	82.6	71.00	Area	0	14.54	100.2	95.9	91.8	86.4	81.0	70.7	65.5	54.7	-23.2
ACC 2 Duct - LP Bypass Bell E	82.9	71.00	Area	0	15.34	100.4	96.1	92.1	86.6	81.2	71.0	65.8	55.0	-22.9
ACC 2 Duct - LP Bypass Tube A	71.6	68.00	Area	0	2.31	88.2	84.9	80.8	75.4	70.0	59.7	54.5	43.8	-34.2
ACC 2 Duct - LP Bypass Tube B	71.6	68.00	Area	0	2.31	88.2	84.9	80.8	75.4	70.0	59.7	54.5	43.8	-34.2
ACC 2 Duct - LP Bypass Tube C	71.6	68.00	Area	0	2.31	88.2	84.9	80.8	75.4	70.0	59.7	54.5	43.8	-34.2
ACC 2 Duct - LP Bypass Tube D	71.6	68.00	Area	0	2.31	88.2	84.9	80.8	75.4	70.0	59.7	54.5	43.8	-34.2
ACC 2 Duct - Main A	89.2	72.00	Area	0	52.37	106.7	102.5	98.4	92.9	87.5	77.3	72.1	61.3	-16.6
ACC 2 Duct - Main B	87.8	72.00	Area	0	36.49	105.2	100.9	96.8	91.3	85.9	75.7	70.5	59.7	-18.2
ACC 2 Duct - Main D	87.8	72.00	Area	0	37.90	105.3	101.1	97.0	91.5	86.1	75.9	70.7	59.9	-18.0
ACC 2 Duct - Main E	84.6	72.00	Area	0	18.33	102.2	97.9	93.8	88.4	83.0	72.7	67.5	56.8	-21.2
ACC 2 Duct - Main F	84.2	72.00	Area	0	16.54	101.7	97.5	93.4	87.9	82.5	72.3	67.1	56.3	-21.6
ACC 2 Duct - Main H	89.2	72.00	Area	0	52.36	106.7	102.5	98.4	92.9	87.5	77.3	72.1	61.3	-16.6
ACC 2 Duct - Main M	84.9	72.00	Area	0	19.41	102.4	98.2	94.1	88.6	83.2	73.0	67.8	57.0	-20.9
ACC 2 Duct - Main N	83.5	72.00	Area	0	142.12	111.1	106.8	102.7	97.3	91.9	81.6	76.4	65.6	-12.3
ACC 2 Duct - Main O	82.8	72.00	Area	0	121.31	110.4	106.1	102.0	96.6	91.2	80.9	75.7	65.0	-13.0
ACC 2 Duct - Main P	82.8	72.00	Area	0	120.75	110.4	106.1	102.0	96.5	91.1	80.9	75.7	64.9	-13.0
ACC 2 Duct - Main Q	85.4	72.00	Area	0	21.64	102.9	98.6	94.5	89.1	83.7	73.4	68.2	57.5	-20.4
ACC 2 Duct - Main R	85.2	72.00	Area	0	21.01	102.8	98.5	94.4	88.9	83.6	73.3	68.1	57.3	-20.6
ACC 2 Duct - Main S	92.9	72.00	Area	0	121.95	110.4	106.2	102.1	96.6	91.2	81.0	75.8	65.0	-12.9
ACC 2 Duct - Riser 1 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 1 B	80.1	62.00	Area	0	64.21	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7

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Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - Riser 1 C	80.0	62.00	Area	0	63.57	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 1 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 2 Duct - Riser 2 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 2 B	80.1	62.00	Area	0	64.21	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 2 Duct - Riser 2 C	80.0	62.00	Area	0	63.56	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 2 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 2 Duct - Riser 3 A	80.0	62.00	Area	0	63.74	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 3 B	80.1	62.00	Area	0	64.20	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 2 Duct - Riser 3 C	80.0	62.00	Area	0	63.58	97.6	93.3	89.2	83.8	78.4	68.1	62.9	52.2	-25.8
ACC 2 Duct - Riser 3 D	80.1	62.00	Area	0	64.39	97.6	93.4	89.3	83.8	78.4	68.2	63.0	52.2	-25.7
ACC 2 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACHE 1	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	98.3	96.9	94.3	88.5	83.0	76.9
ACHE 2	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	98.3	96.9	94.3	88.5	83.0	76.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Ammonia Forwarding Pump	93.1	93.10	Point	0		96.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Ammonia Injection Skid 1	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Ammonia Injection Skid 2	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Aux Boiler Building - East Side	88.0	64.26	Area	3	234.94	108.8	102.7	100.7	91.7	81.7	68.7	57.7	51.7	43.7
Aux Boiler Building - North Side	88.5	64.26	Area	3	268.09	109.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - Roof	91.9	64.26	Area	0	579.10	112.7	106.6	104.6	96.7	85.7	72.6	61.6	55.7	47.6
Aux Boiler Building - South Side	88.5	64.26	Area	3	268.09	109.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - West Side	88.0	64.26	Area	3	235.85	108.8	102.7	100.7	91.8	81.8	68.7	57.7	51.8	43.7
Aux Boiler Building Vent Louvers - North	86.0	75.22	Area	3	12.00	96.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler Building Vent Louvers - South	86.0	75.22	Area	3	12.00	96.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler FD Fan Inlet	100.0	100.00	Point	0		102.3	102.8	101.7	101.7	98.8	94.8	87.8	80.8	75.7
Aux Boiler Stack Exhaust	100.0	100.00	Point	0		102.2	102.2	100.2	98.2	97.2	93.2	90.2	87.2	94.2
Aux Transformer 1 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 3	82.0	69.16	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6

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Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Aux Transformer 2 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
BFW Pump Enclosure 1-Side 1	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 2	97.2	76.92	Area	3	107.28	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Side 3	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Top	103.5	76.92	Area	0	452.03	119.5	116.9	113.9	108.9	96.9	90.9	86.9	78.9	72.9
BFW Pump Enclosure 2-Side 1	94.4	76.92	Area	3	55.67	110.4	107.8	104.8	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 2	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Side 3	94.4	76.92	Area	3	55.43	110.4	107.8	104.7	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Top	103.4	76.92	Area	0	445.84	119.4	116.9	113.8	108.8	96.9	90.9	86.9	78.9	72.8
Condensate Equipment Bldg 1 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	68.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 1 - North Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - South Side	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 1 - Roof	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - South Side	77.7	56.70	Area	3	126.69	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 1 - West Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - East Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - North Side	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 2 - Roof	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - South Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
CTG 1 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG 2 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG Air Inlet 1	106.2	82.90	Area	0	213.41	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet 2	106.2	82.93	Area	0	211.99	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet Duct 1 - North	99.9	84.40	Area	0	35.83	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - South	99.9	84.44	Area	0	35.50	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - Top	99.9	83.26	Area	0	46.57	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - North	99.9	84.32	Area	0	36.52	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - South	99.9	84.29	Area	0	36.74	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0

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Clear River Energy Center - Source List Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
CTG Air Inlet Duct 2 - Top	89.9	83.15	Area	0	47.70	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Building 1 - East Facade	95.1	64.70	Area	3	1101.55	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 - North Facade	94.0	64.70	Area	3	851.17	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 1 - Roof	89.9	59.70	Area	0	1047.08	111.5	105.3	104.6	89.6	78.8	68.5	64.2	61.3	52.4
CTG Building 1 - West Facade	95.1	64.70	Area	3	1100.83	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - West	70.1	57.55	Area	3	18.00	96.3	87.6	84.9	65.9	54.1	42.8	37.5	36.6	30.7
CTG Building 2 - East Facade	95.1	64.70	Area	3	1100.24	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 - North Facade	94.0	64.70	Area	3	852.46	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 2 - Roof	89.9	59.70	Area	0	1045.75	111.5	105.3	104.6	89.6	78.8	68.5	64.2	61.3	52.4
CTG Building 2 - West Facade	95.1	64.70	Area	3	1098.21	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - West	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
Dermin Water Pump	93.1	93.10	Point	0	86.0	97.0	91.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Duct Burner Skid 1	95.0	95.00	Point	0	87.9	98.9	92.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Duct Burner Skid 2	95.0	95.00	Point	0	87.9	98.9	92.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Emergency Diesel Generator - Side 1	8.2	-7.75	Area	3	38.95	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Side 2	8.2	-7.76	Area	3	39.02	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Top	8.2	-8.56	Area	0	46.93	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Excitation Transformer 1	80.0	80.00	Point	0	76.7	82.6	84.6	79.7	79.7	79.7	73.6	68.6	63.7	56.6
Excitation Transformer 2	80.0	80.00	Point	0	76.7	82.6	84.6	79.7	79.7	79.7	73.6	68.6	63.7	56.6
Fire Pump Building - Roof	-4.1	-23.30	Area	0	82.33	10.1	13.1	7.1	1.1	-12.9	-21.9	-28.9	-34.9	-35.9
Fire Pump Building - Side 1	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 2	-8.5	-23.30	Area	3	29.99	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fire Pump Building - Side 3	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 4	-8.5	-23.30	Area	3	30.11	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fuel Gas Dewpoint Heater	102.2	85.30	Area	0	49.02	97.9	95.7	83.8	81.7	76.0	77.8	85.5	83.9	103.1
Fuel Gas Metering and Regulating Station	93.0	93.00	Point	0	-15.6	-15.6	-15.6	-15.6	72.4	74.4	79.4	89.4	87.4	79.4
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	96.9	90.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	96.9	90.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Gas Aftercooler 1	101.0	84.00	Area	0	50.09	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2

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Gas Aftercooler 2	101.0	83.96	Area	0	51.73	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2
Gas Compressor Bldg Louvers - E	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - N	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - S	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - W	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Building - East Side	99.1	76.70	Area	3	173.15	113.3	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
Gas Compressor Building - North Side	97.5	76.70	Area	3	119.51	111.7	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - Roof	101.0	76.70	Area	0	289.92	115.3	118.2	112.2	106.3	92.3	83.2	76.2	70.3	69.2
Gas Compressor Building - South Side	97.5	76.70	Area	3	120.04	111.8	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - West Side	99.1	76.70	Area	3	173.41	113.4	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
GSU 1 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
HRSG 1 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Body - Side 2	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Exhaust Stack	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 1 - Piping and Valves	98.5	90.00	Line	0	71.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 1 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - T1 - Side 1	98.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0

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HRSG 1 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Sides 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	98.4	85.4	88.4	75.4	58.4	41.4
HRSG 2 - Body - Side 2	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 2 - Exhaust Stack	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 2 - Piping and Valves	98.5	80.06	Line	0	70.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 2 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG Recirc Pump 1	93.0	93.00	Point	0		85.9	86.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
HRSG Recirc Pump 2	93.0	93.00	Point	0		85.9	86.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Isolation Transformer 1	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Isolation Transformer 2	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Rooftop Vent Fan - Admin 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0

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Rooftop Vent Fan - CTG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Safety Vent	29.0	29.00	Point	0		13.4	20.9	27.0	28.0	18.0	10.8	21.9	23.0	24.0
Scanner Cooling Air Blower 1	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Scanner Cooling Air Blower 2	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Service Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Startup Vent - Aux Boiler Blowdown	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Aux Boiler Startup	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 1	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 2	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Steam Turbine Drains Tank	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Steam Turbine Bldg 1 - East Facade	92.4	64.93	Area	3	554.75	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 1 - North Facade	90.7	64.93	Area	3	373.57	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9
Steam Turbine Bldg 1 - Roof	88.8	59.93	Area	0	764.72	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 1 - South Facade	95.7	64.93	Area	3	1206.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 1 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - East Facade	92.4	64.93	Area	3	553.90	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - North Facade	50.7	64.93	Area	3	374.51	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9

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**Clear River Energy Center - Source List
Typical Shutdown Analysis - A-Weight - ISO9613**

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Steam Turbine Bldg 2 - Roof	88.8	59.93	Area	0	764.05	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 2 - South Facade 1	95.7	64.93	Area	3	1206.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 2 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
STG Building 1 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 2	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 2	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	86.7	86.7	82.7	80.7	77.7	76.7
STW Heat Exchanger 1	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	95.2	94.2	86.2
STW Heat Exchanger 2	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	95.2	94.2	86.2
Waste Water Pump	83.1	83.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Water Treatment Building - East Side	78.9	56.70	Area	3	167.69	93.2	96.2	90.2	84.2	70.2	61.2	54.2	48.2	47.2
Water Treatment Building - North Side	83.3	56.70	Area	3	452.35	97.5	100.5	94.5	88.5	74.5	65.6	58.5	52.5	51.5
Water Treatment Building - Roof	86.4	56.70	Area	0	939.65	100.7	103.6	97.6	91.7	77.7	68.6	61.6	55.7	54.7
Water Treatment Building - South Side	83.3	56.70	Area	3	453.24	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - West Side	78.9	56.70	Area	3	167.20	93.2	96.1	90.2	84.2	70.2	61.2	54.2	48.2	47.2
WTB Ventilation Louvers - North Side	90.0	77.96	Area	3	16.00	96.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0
WTB Ventilation Louvers - South Side	90.0	77.96	Area	3	16.00	96.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0



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Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Receiver M1 - Wallum Lake Road												
ACC 1 Bottom	108.0	72.7	0.0	0.0	789.6	-68.9	1.0	-2.9	-3.2	-8.3	0.0	26.7
ACC 1 Duct - Finger 1 A	75.9	52.0	0.0	0.0	691.9	-67.8	-0.5	-4.2	-1.0	0.0	0.0	2.5
ACC 1 Duct - Finger 1 B	75.9	52.0	0.0	0.0	690.7	-67.8	-0.5	-1.0	-1.2	0.0	2.6	8.0
ACC 1 Duct - Finger 1 C	75.9	52.0	0.0	0.0	692.8	-67.8	-0.5	-7.2	-0.8	0.0	0.2	-0.2
ACC 1 Duct - Finger 2 A	76.0	52.0	0.0	0.0	704.1	-67.9	-0.5	-4.3	-1.0	0.0	0.0	2.3
ACC 1 Duct - Finger 2 B	75.9	52.0	0.0	0.0	702.9	-67.9	-0.5	-4.3	-0.9	0.0	2.4	4.6
ACC 1 Duct - Finger 2 C	75.9	52.0	0.0	0.0	705.1	-68.0	-0.5	-11.0	-0.6	0.0	0.1	-4.0
ACC 1 Duct - Finger 3 A	76.0	52.0	0.0	0.0	716.5	-68.1	-0.5	-4.3	-1.0	0.0	0.0	2.2
ACC 1 Duct - Finger 3 B	75.9	52.0	0.0	0.0	715.4	-68.1	-0.5	-4.5	-0.9	0.0	2.1	4.0
ACC 1 Duct - Finger 3 C	75.9	52.0	0.0	0.0	717.5	-68.1	-0.5	-9.0	-0.7	0.0	0.6	-1.8
ACC 1 Duct - HRH Bypass Bell A	83.8	72.0	0.0	0.0	660.8	-67.4	0.6	-21.2	-0.5	0.0	0.0	-4.7
ACC 1 Duct - HRH Bypass Bell B	83.8	72.0	0.0	0.0	660.7	-67.4	1.1	-18.4	-0.5	0.0	1.3	-2.3
ACC 1 Duct - HRH Bypass Bell C	83.9	72.0	0.0	0.0	659.0	-67.4	0.8	-20.3	-0.5	0.0	0.0	-2.2
ACC 1 Duct - HRH Bypass Bell D	83.6	72.0	0.0	0.0	660.0	-67.4	0.8	-13.1	-0.4	0.0	0.3	3.7
ACC 1 Duct - HRH Bypass Bell E	83.9	72.0	0.0	0.0	662.6	-67.4	0.8	-20.3	-0.4	0.0	2.0	-1.5
ACC 1 Duct - HRH Bypass Tube A	72.6	69.0	0.0	0.0	659.4	-67.4	0.7	-13.0	-0.5	0.0	0.0	-7.5
ACC 1 Duct - HRH Bypass Tube B	72.6	69.0	0.0	0.0	659.1	-67.4	0.8	-17.2	-0.5	0.0	0.2	-7.3
ACC 1 Duct - HRH Bypass Tube C	72.6	69.0	0.0	0.0	659.7	-67.4	0.8	-13.0	-0.4	0.0	0.0	-11.6
ACC 1 Duct - HRH Bypass Tube D	72.6	69.0	0.0	0.0	659.4	-67.4	0.8	-13.1	-0.5	0.0	0.0	-7.5
ACC 1 Duct - LP Bypass Bell A	82.8	71.0	0.0	0.0	665.1	-67.4	0.6	-21.4	-0.5	0.0	0.0	-5.8
ACC 1 Duct - LP Bypass Bell B	82.8	71.0	0.0	0.0	665.0	-67.4	1.2	-16.4	-0.4	0.0	0.0	-0.3
ACC 1 Duct - LP Bypass Bell C	82.9	71.0	0.0	0.0	663.3	-67.4	0.8	-18.8	-0.4	0.0	0.9	-2.1
ACC 1 Duct - LP Bypass Bell D	82.6	71.0	0.0	0.0	664.4	-67.4	0.8	-14.9	-0.4	0.0	0.4	1.1
ACC 1 Duct - LP Bypass Bell E	82.9	71.0	0.0	0.0	666.9	-67.5	0.8	-17.9	-0.4	0.0	0.2	-1.9
ACC 1 Duct - LP Bypass Tube A	71.6	68.0	0.0	0.0	663.8	-67.4	0.8	-14.7	-0.4	0.0	0.0	-10.2
ACC 1 Duct - LP Bypass Tube B	71.6	68.0	0.0	0.0	663.4	-67.4	0.8	-14.8	-0.4	0.0	0.3	-9.9
ACC 1 Duct - LP Bypass Tube C	71.6	68.0	0.0	0.0	664.1	-67.4	0.8	-17.4	-0.4	0.0	0.0	-12.8
ACC 1 Duct - LP Bypass Tube D	71.6	68.0	0.0	0.0	663.7	-67.4	0.8	-13.5	-0.4	0.0	0.0	-8.9
ACC 1 Duct - Main A	93.4	72.0	0.0	0.0	655.1	-67.3	0.5	-10.4	-0.9	0.0	0.3	15.6
ACC 1 Duct - Main B	87.7	72.0	0.0	0.0	649.9	-67.2	0.7	-23.3	-0.6	0.0	0.9	-1.9
ACC 1 Duct - Main C	91.1	72.0	0.0	0.0	658.7	-67.4	0.7	-22.2	-0.5	0.0	2.7	4.5

Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 1 Duct - Main D	87.7	72.0	0.0	0.0	645.2	-67.2	0.7	-7.1	-0.8	0.0	1.1	14.5
ACC 1 Duct - Main E	85.0	72.0	0.0	0.0	648.0	-67.2	0.7	-3.3	-1.1	0.0	2.0	16.0
ACC 1 Duct - Main F	84.6	72.0	0.0	0.0	651.2	-67.3	0.7	-4.9	-0.9	0.0	0.0	12.3
ACC 1 Duct - Main G	91.1	72.0	0.0	0.0	660.5	-67.4	0.8	-8.8	-0.5	0.0	0.0	14.2
ACC 1 Duct - Main H	93.4	72.0	0.0	0.0	655.0	-67.3	1.2	-8.8	-0.7	0.0	1.5	19.3
ACC 1 Duct - Main M	84.9	72.0	0.0	0.0	697.2	-67.9	1.0	-17.2	-0.4	0.0	3.5	3.9
ACC 1 Duct - Main N	93.5	72.0	0.0	0.0	682.0	-67.7	0.7	-22.1	-0.6	0.0	2.6	6.4
ACC 1 Duct - Main O	92.8	72.0	0.0	0.0	684.2	-67.7	1.4	-13.9	-0.4	0.0	0.1	12.3
ACC 1 Duct - Main P	92.8	72.0	0.0	0.0	685.0	-67.7	0.9	-18.0	-0.4	0.0	0.4	8.0
ACC 1 Duct - Main Q	92.9	72.0	0.0	0.0	683.4	-67.7	0.9	-25.1	-0.8	0.0	2.1	2.3
ACC 1 Duct - Main R	85.4	72.0	0.0	0.0	670.2	-67.5	0.8	-14.5	-0.4	0.0	0.2	4.0
ACC 1 Duct - Main S	85.2	72.0	0.0	0.0	668.4	-67.5	0.8	-18.0	-0.4	0.0	1.1	1.3
ACC 1 Duct - Riser 1 A	80.0	62.0	0.0	0.0	668.7	-67.5	-0.1	-7.3	-0.6	0.0	0.5	5.1
ACC 1 Duct - Riser 1 B	80.1	62.0	0.0	0.0	670.7	-67.5	-0.1	-10.2	-0.5	0.0	0.1	1.8
ACC 1 Duct - Riser 1 C	80.0	62.0	0.0	0.0	671.7	-67.5	-0.1	-15.4	-0.4	0.0	0.0	-3.5
ACC 1 Duct - Riser 1 D	80.1	62.0	0.0	0.0	669.6	-67.5	-0.1	-8.7	-0.5	0.0	0.5	3.7
ACC 1 Duct - Riser 2 A	80.0	62.0	0.0	0.0	681.2	-67.7	-0.1	-9.2	-0.5	0.0	0.7	3.2
ACC 1 Duct - Riser 2 B	80.1	62.0	0.0	0.0	683.3	-67.7	-0.1	-13.1	-0.4	0.0	0.2	-1.1
ACC 1 Duct - Riser 2 C	80.0	62.0	0.0	0.0	684.2	-67.7	-0.1	-15.8	-0.4	0.0	0.0	-4.0
ACC 1 Duct - Riser 2 D	80.1	62.0	0.0	0.0	682.1	-67.7	-0.1	-10.1	-0.5	0.0	0.6	2.3
ACC 1 Duct - Riser 3 A	80.0	62.0	0.0	0.0	694.0	-67.8	-0.1	-9.9	-0.5	0.0	2.8	4.5
ACC 1 Duct - Riser 3 B	80.1	62.0	0.0	0.0	696.1	-67.8	-0.1	-14.7	-0.4	0.0	3.0	0.0
ACC 1 Duct - Riser 3 C	80.0	62.0	0.0	0.0	697.0	-67.9	-0.1	-15.8	-0.4	0.0	7.0	2.9
ACC 1 Duct - Riser 3 D	80.1	62.0	0.0	0.0	695.0	-67.8	-0.1	-10.1	-0.5	0.0	3.6	5.1
ACC 1 Top	109.0	72.7	0.0	0.0	790.0	-68.9	0.4	-6.1	-2.2	-6.8	0.1	25.5
ACC 2 Bottom	109.0	72.7	0.0	0.0	707.0	-68.0	0.7	-0.8	-2.9	-8.6	0.0	29.5
ACC 2 Duct - Finger 1 A	75.9	52.0	0.0	0.0	774.4	-68.8	-0.4	-4.3	-1.1	0.0	0.0	1.4
ACC 2 Duct - Finger 1 B	75.9	52.0	0.0	0.0	773.2	-68.8	-0.4	-4.1	-1.0	0.0	2.3	3.9
ACC 2 Duct - Finger 1 C	75.9	52.0	0.0	0.0	775.4	-68.8	-0.4	-11.5	-0.7	0.0	0.1	-5.4
ACC 2 Duct - Finger 2 A	76.0	52.0	0.0	0.0	786.9	-68.9	-0.4	-4.4	-1.1	0.0	0.0	1.2
ACC 2 Duct - Finger 2 B	75.9	52.0	0.0	0.0	785.7	-68.9	-0.4	-6.2	-0.9	0.0	2.0	1.5
ACC 2 Duct - Finger 2 C	75.9	52.0	0.0	0.0	787.9	-68.9	-0.4	-13.8	-0.6	0.0	0.1	-7.8

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Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Finger 3 A	76.0	52.0	0.0	0.0	799.4	-69.0	-0.4	-4.7	-1.0	0.0	0.0	0.8
ACC 2 Duct - Finger 3 B	75.9	52.0	0.0	0.0	798.3	-69.0	-0.4	-6.6	-0.9	0.0	2.1	1.0
ACC 2 Duct - Finger 3 C	75.9	52.0	0.0	0.0	800.5	-69.1	-0.4	-12.3	-0.7	0.0	0.0	-6.6
ACC 2 Duct - HRH Bypass Bell A	83.8	72.0	0.0	0.0	761.7	-68.6	1.1	-23.6	-0.7	0.0	0.0	-8.1
ACC 2 Duct - HRH Bypass Bell B	83.8	72.0	0.0	0.0	761.6	-68.6	1.6	-25.7	-0.9	0.0	0.0	-9.9
ACC 2 Duct - HRH Bypass Bell C	83.9	72.0	0.0	0.0	759.9	-68.6	1.3	-23.5	-0.7	0.0	2.7	-4.9
ACC 2 Duct - HRH Bypass Bell D	83.6	72.0	0.0	0.0	761.1	-68.6	1.3	-17.7	-0.5	0.0	0.5	-1.4
ACC 2 Duct - HRH Bypass Bell E	83.9	72.0	0.0	0.0	763.5	-68.6	1.3	-22.6	-0.7	0.0	2.3	-4.4
ACC 2 Duct - HRH Bypass Tube A	72.6	69.0	0.0	0.0	760.5	-68.6	1.3	-18.2	-0.5	0.0	0.0	-13.4
ACC 2 Duct - HRH Bypass Tube B	72.6	69.0	0.0	0.0	760.2	-68.6	1.3	-18.2	-0.5	0.0	0.6	-12.7
ACC 2 Duct - HRH Bypass Tube C	72.6	69.0	0.0	0.0	760.8	-68.6	1.3	-19.6	-0.6	0.0	0.0	-14.9
ACC 2 Duct - HRH Bypass Tube D	72.6	69.0	0.0	0.0	760.5	-68.6	1.4	-18.4	-0.5	0.0	0.0	-13.5
ACC 2 Duct - LP Bypass Bell A	82.8	71.0	0.0	0.0	766.1	-68.7	1.1	-23.2	-0.7	0.0	0.0	-8.6
ACC 2 Duct - LP Bypass Bell B	82.8	71.0	0.0	0.0	766.0	-68.7	1.6	-25.7	-0.9	0.0	0.0	-10.9
ACC 2 Duct - LP Bypass Bell C	82.9	71.0	0.0	0.0	764.3	-68.7	1.3	-22.1	-0.6	0.0	1.3	-5.9
ACC 2 Duct - LP Bypass Bell D	82.6	71.0	0.0	0.0	765.5	-68.7	1.3	-17.9	-0.5	0.0	0.5	-2.6
ACC 2 Duct - LP Bypass Bell E	82.9	71.0	0.0	0.0	767.9	-68.7	1.4	-20.9	-0.6	0.0	0.0	-6.0
ACC 2 Duct - LP Bypass Tube A	71.6	68.0	0.0	0.0	765.0	-68.7	1.3	-18.5	-0.5	0.0	0.0	-14.7
ACC 2 Duct - LP Bypass Tube B	71.6	68.0	0.0	0.0	764.6	-68.7	1.3	-18.5	-0.5	0.0	0.7	-14.0
ACC 2 Duct - LP Bypass Tube C	71.6	68.0	0.0	0.0	765.3	-68.7	1.3	-19.6	-0.6	0.0	0.0	-15.8
ACC 2 Duct - LP Bypass Tube D	71.6	68.0	0.0	0.0	764.9	-68.7	1.4	-18.6	-0.5	0.0	0.0	-14.8
ACC 2 Duct - Main A	89.2	72.0	0.0	0.0	748.9	-68.5	0.9	-15.6	-0.5	0.0	0.3	5.8
ACC 2 Duct - Main B	87.6	72.0	0.0	0.0	750.4	-68.5	1.3	-24.4	-0.8	0.0	0.0	-4.8
ACC 2 Duct - Main D	87.8	72.0	0.0	0.0	745.8	-68.4	1.3	-13.4	-0.5	0.0	0.5	7.2
ACC 2 Duct - Main E	84.6	72.0	0.0	0.0	748.3	-68.5	1.3	-11.2	-0.5	0.0	0.7	9.4
ACC 2 Duct - Main F	84.2	72.0	0.0	0.0	751.2	-68.5	1.3	-14.3	-0.5	0.0	1.2	3.4
ACC 2 Duct - Main H	89.2	72.0	0.0	0.0	748.8	-68.5	1.6	-24.6	-0.8	0.0	0.4	-2.6
ACC 2 Duct - Main M	84.9	72.0	0.0	0.0	782.8	-68.9	1.3	-19.2	-0.5	0.0	0.0	-2.4
ACC 2 Duct - Main N	93.5	72.0	0.0	0.0	767.3	-68.7	1.0	-21.7	-0.6	0.0	0.6	4.1
ACC 2 Duct - Main O	92.8	72.0	0.0	0.0	770.3	-68.7	1.3	-18.6	-0.5	0.0	0.3	6.6
ACC 2 Duct - Main P	92.8	72.0	0.0	0.0	769.6	-68.7	1.6	-24.9	-0.8	0.0	0.9	0.9
ACC 2 Duct - Main Q	85.4	72.0	0.0	0.0	755.2	-68.6	1.3	-16.5	-0.5	0.0	0.2	1.3



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Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Main R	85.2	72.0	0.0	0.0	753.7	-68.5	1.3	-23.9	-0.7	0.0	2.0	-4.6
ACC 2 Duct - Main S	92.9	72.0	0.0	0.0	768.9	-68.7	1.3	-24.0	-0.8	0.0	0.3	1.0
ACC 2 Duct - Riser 1 A	80.0	62.0	0.0	0.0	753.3	-68.5	0.1	-7.0	-0.7	0.0	1.4	5.3
ACC 2 Duct - Riser 1 B	80.1	62.0	0.0	0.0	755.4	-68.6	0.1	-14.0	-0.5	0.0	0.2	-2.7
ACC 2 Duct - Riser 1 C	80.0	62.0	0.0	0.0	756.4	-68.6	0.1	-16.0	-0.5	0.0	0.0	-5.0
ACC 2 Duct - Riser 1 D	80.1	62.0	0.0	0.0	754.3	-68.5	0.1	-7.1	-0.7	0.0	1.4	5.3
ACC 2 Duct - Riser 2 A	80.0	62.0	0.0	0.0	766.2	-68.7	0.1	-10.8	-0.6	0.0	0.8	0.9
ACC 2 Duct - Riser 2 B	80.1	62.0	0.0	0.0	768.2	-68.7	0.1	-15.4	-0.5	0.0	0.2	-4.2
ACC 2 Duct - Riser 2 C	80.0	62.0	0.0	0.0	769.2	-68.7	0.1	-17.6	-0.5	0.0	0.0	-6.7
ACC 2 Duct - Riser 2 D	80.1	62.0	0.0	0.0	767.2	-68.7	0.1	-11.4	-0.6	0.0	0.7	0.2
ACC 2 Duct - Riser 3 A	80.0	62.0	0.0	0.0	779.1	-68.8	0.1	-11.2	-0.6	0.0	0.9	0.5
ACC 2 Duct - Riser 3 B	80.1	62.0	0.0	0.0	781.1	-68.8	0.1	-16.1	-0.5	0.0	0.3	-5.0
ACC 2 Duct - Riser 3 C	80.0	62.0	0.0	0.0	782.1	-68.9	0.1	-17.6	-0.6	0.0	0.0	-6.8
ACC 2 Duct - Riser 3 D	80.1	62.0	0.0	0.0	780.1	-68.8	0.1	-13.3	-0.6	0.0	1.0	-1.5
ACC 2 Top	109.0	72.7	0.0	0.0	707.5	-68.0	0.3	-5.2	-2.1	-7.2	0.4	27.3
ACHE 1	98.0	72.9	0.0	0.0	751.3	-68.5	2.2	-7.4	-2.2	0.0	0.0	23.1
ACHE 2	99.0	72.9	0.0	0.0	645.5	-67.2	1.8	-5.9	-2.2	0.0	0.8	26.2
Air Process Skid 2	93.0	93.0	0.0	0.0	763.5	-68.6	3.2	-28.0	-4.1	0.0	0.0	-4.5
Air Process Skid 2	93.0	93.0	0.0	0.0	660.2	-67.4	3.0	-26.3	-3.0	0.0	0.0	-0.7
Ammonia Forwarding Pump	93.1	93.1	0.0	0.0	762.2	-68.6	3.1	-7.9	-4.2	0.0	0.1	15.6
Ammonia Injection Skid 1	98.1	98.1	0.0	0.0	714.2	-68.1	3.0	-26.9	-3.0	0.0	2.4	5.6
Ammonia Injection Skid 2	98.1	98.1	0.0	0.0	609.9	-66.7	2.5	-5.2	-5.2	0.0	3.4	26.8
Aux Boiler Building - East Side	88.5	64.3	0.0	3.0	675.2	-67.6	1.2	-4.6	-0.5	0.0	0.0	19.5
Aux Boiler Building - North Side	88.5	64.3	0.0	3.0	686.4	-67.7	1.3	-3.9	-0.5	0.0	0.0	20.6
Aux Boiler Building - Roof	91.9	64.3	0.0	0.0	688.2	-67.7	0.6	-5.5	-0.5	0.0	0.6	19.3
Aux Boiler Building - South Side	88.5	64.3	0.0	3.0	690.1	-67.8	1.2	-10.2	-0.3	0.0	0.3	14.9
Aux Boiler Building - West Side	88.0	64.3	0.0	3.0	701.0	-67.9	1.3	-15.5	-0.3	0.0	3.3	11.9
Aux Boiler Building Vent Louvers - North	86.0	75.2	0.0	3.0	681.9	-67.7	1.9	-2.6	-2.4	0.0	0.0	18.3
Aux Boiler Building Vent Louvers - South	86.0	75.2	0.0	3.0	694.4	-67.8	2.0	-16.0	-0.9	0.0	0.3	6.7
Aux Boiler FD Fan Inlet	100.0	100.0	0.0	0.0	674.3	-67.6	1.5	-5.1	-2.2	0.0	2.5	28.0
Aux Boiler Stack Exhaust	100.0	100.0	0.0	0.0	685.0	-67.8	0.7	0.0	-4.3	0.0	0.0	20.6
Aux Transformer 1 - Side 1	82.0	68.2	0.0	3.0	717.7	-68.1	2.2	-26.8	-1.8	0.0	3.5	-5.9



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Aux Transformer 1 - Side 2	82.0	70.2	0.0	3.0	713.8	-68.1	2.2	-25.6	-1.4	0.0	1.9	-6.0
Aux Transformer 1 - Side 3	82.0	69.2	0.0	3.0	716.0	-68.1	2.2	-25.1	-1.3	0.0	3.2	-4.1
Aux Transformer 1 - Side 4	82.0	70.2	0.0	3.0	719.9	-68.1	2.2	-26.7	-1.7	0.0	4.6	-4.8
Aux Transformer 1 - Top	82.0	66.9	0.0	0.0	716.9	-68.1	2.0	-24.8	-1.3	0.0	3.5	-6.7
Aux Transformer 2 - Side 1	82.0	69.2	0.0	3.0	617.7	-66.8	1.7	-15.8	-1.0	0.0	9.6	11.7
Aux Transformer 2 - Side 2	82.0	70.2	0.0	3.0	613.7	-66.8	1.7	-8.1	-1.3	0.0	1.0	10.5
Aux Transformer 2 - Side 3	82.0	69.2	0.0	3.0	615.7	-66.8	1.7	-8.4	-1.4	0.0	3.5	13.6
Aux Transformer 2 - Side 4	82.0	70.2	0.0	3.0	619.7	-66.8	1.8	-17.2	-1.0	0.0	9.3	11.0
Aux Transformer 2 - Top	82.0	66.9	0.0	0.0	616.7	-66.8	1.3	-6.0	-1.7	0.0	2.9	11.7
BFW Pump Enclosure 1-Side 1	94.4	76.9	0.0	3.0	758.0	-68.6	1.7	-25.4	-0.7	0.0	0.0	4.4
BFW Pump Enclosure 1-Side 2	97.2	76.9	0.0	3.0	747.2	-68.5	1.7	-25.2	-0.7	0.0	0.3	7.8
BFW Pump Enclosure 1-Side 3	94.4	76.9	0.0	3.0	751.6	-68.5	1.7	-23.3	-0.5	0.0	0.0	5.7
BFW Pump Enclosure 1-Side 4	97.2	76.9	0.0	3.0	762.3	-68.6	1.7	-25.4	-0.7	0.0	0.0	7.2
BFW Pump Enclosure 2-Side 1	103.5	76.9	0.0	0.0	754.8	-68.5	1.5	-24.1	-0.6	0.0	0.1	11.7
BFW Pump Enclosure 2-Side 2	94.4	76.9	0.0	3.0	654.3	-67.3	1.5	-22.7	-0.5	0.0	0.0	8.4
BFW Pump Enclosure 2-Side 3	97.2	76.9	0.0	3.0	643.1	-67.2	1.5	-22.3	-0.4	0.0	0.8	12.7
BFW Pump Enclosure 2-Side 4	94.4	76.9	0.0	3.0	646.8	-67.2	1.5	-23.5	-0.5	0.0	9.1	16.9
BFW Pump Enclosure 2-Top	97.2	76.9	0.0	3.0	657.4	-67.4	1.6	-25.3	-0.6	0.0	0.0	9.5
Condensate Equipment Bldg 1 - East Side	103.4	76.9	0.0	0.0	650.5	-67.3	1.1	-20.3	-0.4	0.0	0.8	17.4
Condensate Equipment Bldg 1 - North Side	77.7	56.7	0.0	3.0	745.5	-68.4	1.9	-7.0	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 1 - Roof	75.2	56.7	0.0	0.0	747.4	-68.5	1.9	-18.8	-0.3	0.0	0.7	-6.8
Condensate Equipment Bldg 1 - South Side	78.0	51.7	0.0	0.0	752.7	-68.5	1.6	-7.8	-0.6	0.0	0.1	2.8
Condensate Equipment Bldg 1 - West Side	75.2	56.7	0.0	3.0	758.0	-68.6	1.9	-15.2	-0.4	0.0	0.5	-3.6
Condensate Equipment Bldg 2 - East Side	77.7	56.7	0.0	3.0	759.8	-68.6	1.9	-18.3	-0.4	0.0	1.1	-3.5
Condensate Equipment Bldg 2 - North Side	77.7	56.7	0.0	3.0	662.8	-67.4	1.8	-6.0	-0.6	0.0	0.0	9.3
Condensate Equipment Bldg 2 - Roof	75.2	56.7	0.0	0.0	664.0	-67.4	1.6	-6.1	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 2 - South Side	78.0	51.7	0.0	0.0	669.8	-67.5	1.0	-5.6	-0.5	0.0	0.0	5.4
Condensate Equipment Bldg 2 - West Side	75.2	56.7	0.0	3.0	675.9	-67.6	1.7	-10.2	-0.3	0.0	0.0	1.7
CTG 1 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	676.8	-67.6	1.7	-13.0	-0.3	0.0	0.0	1.5
CTG 2 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	739.2	-68.4	3.2	-6.7	-5.7	0.0	0.0	26.2
CTG Air Inlet 1	106.2	82.9	0.0	0.0	637.2	-67.1	2.9	-7.5	-4.5	0.0	0.0	27.6
					769.2	-68.7	3.2	-26.9	-8.4	0.0	0.1	5.5

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CTG Air Inlet 2	106.2	82.9	0.0	0.0	666.4	-67.5	2.8	-26.1	-7.1	0.0	0.2	8.4
CTG Air Inlet Duct 1 - North	99.9	84.4	0.0	0.0	750.4	-68.5	2.7	-25.3	-2.8	0.0	1.3	7.3
CTG Air Inlet Duct 1 - South	99.9	84.4	0.0	0.0	752.0	-68.5	2.7	-26.1	-3.3	0.0	1.0	5.7
CTG Air Inlet Duct 1 - Top	99.9	83.3	0.0	0.0	751.3	-68.5	2.4	-26.6	-3.7	0.0	0.1	3.6
CTG Air Inlet Duct 2 - North	99.9	84.3	0.0	0.0	647.7	-67.2	2.2	-23.3	-2.2	0.0	1.0	10.3
CTG Air Inlet Duct 2 - South	99.9	84.3	0.0	0.0	649.7	-67.2	2.2	-25.2	-2.6	0.0	0.0	7.1
CTG Air Inlet Duct 2 - Top	99.9	83.2	0.0	0.0	649.4	-67.2	2.0	-26.7	-3.6	0.0	0.9	5.3
CTG Building 1 - East Facade	95.1	64.7	0.0	3.0	718.8	-68.1	0.8	-5.0	-0.3	0.0	0.0	25.4
CTG Building 1 - North Facade	94.0	64.7	0.0	3.0	727.6	-68.2	0.8	-6.7	-0.3	0.0	0.0	22.6
CTG Building 1 - Roof	89.8	59.7	0.0	0.0	733.1	-68.3	-0.1	-4.7	-0.4	0.0	0.2	16.6
CTG Building 1 - West Facade	95.1	64.7	0.0	3.0	746.3	-68.5	0.8	-17.6	-0.3	0.0	0.0	12.8
CTG Building 1 Vent Louvers - East	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-6.6	-2.6	0.0	0.0	17.0
CTG Building 1 Vent Louvers - North	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-14.1	-1.1	0.0	0.2	11.2
CTG Building 1 Vent Louvers - West	70.1	57.6	0.0	3.0	742.9	-68.4	1.3	-17.2	-0.2	0.0	0.0	-11.4
CTG Building 2 - East Facade	95.1	64.7	0.0	3.0	616.4	-66.8	0.5	-1.3	-0.3	0.0	0.0	30.2
CTG Building 2 - North Facade	94.0	64.7	0.0	3.0	624.3	-66.9	0.6	-1.9	-0.3	0.0	0.0	28.5
CTG Building 2 - Roof	89.9	59.7	0.0	0.0	630.5	-67.0	0.0	-4.6	-0.3	0.0	0.0	17.9
CTG Building 2 - West Facade	95.1	64.7	0.0	3.0	643.6	-67.2	0.5	-14.5	-0.2	0.0	0.0	16.7
CTG Building 2 Vent Louvers - East	89.6	77.0	0.0	3.0	617.4	-66.8	1.5	-0.1	-5.4	0.0	0.0	21.8
CTG Building 2 Vent Louvers - North	89.6	77.0	0.0	3.0	616.4	-66.8	1.5	-0.1	-5.4	0.0	1.4	23.2
CTG Building 2 Vent Louvers - West	89.6	77.0	0.0	3.0	639.7	-67.1	1.5	-20.4	-1.6	0.0	0.0	4.9
Demin Water Pump	93.1	93.1	0.0	0.0	675.5	-67.6	3.1	-24.9	-2.0	0.0	0.5	2.2
Duct Burner Skid 1	95.0	95.0	0.0	0.0	717.4	-68.1	3.0	-25.2	-2.1	0.0	2.8	5.4
Duct Burner Skid 2	95.0	95.0	0.0	0.0	613.7	-66.8	2.5	-3.6	-3.8	0.0	1.8	25.2
Emergency Diesel Generator - Side 1	8.2	-7.7	0.0	3.0	683.7	-67.7	3.3	-28.3	-3.9	0.0	2.1	-63.3
Emergency Diesel Generator - Side 2	8.2	-7.8	0.0	3.0	680.2	-67.6	3.3	-28.2	-3.8	0.0	1.2	-63.9
Emergency Diesel Generator - Top	8.2	-8.6	0.0	0.0	682.0	-67.7	3.1	-27.5	-3.7	0.0	2.8	-84.8
Excitation Transformer 1	80.0	80.0	0.0	0.0	718.7	-68.1	2.2	-24.5	-1.3	0.0	2.8	-8.9
Excitation Transformer 2	80.0	80.0	0.0	0.0	617.1	-66.8	1.6	-5.3	-2.2	0.0	2.4	9.6
Fire Pump Building - Roof	4.1	-23.3	0.0	0.0	630.7	-67.0	1.2	-5.5	-0.5	0.0	0.0	-76.0
Fire Pump Building - Side 1	-5.7	-23.3	0.0	3.0	633.9	-67.0	1.8	-11.8	-0.3	0.0	0.0	-80.1
Fire Pump Building - Side 2	-8.5	-23.3	0.0	3.0	631.3	-67.0	1.8	-6.6	-0.4	0.0	0.0	-77.7



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Fire Pump Building - Side 3	-5.7	-23.3	0.0	3.0	627.3	-68.9	1.7	-6.4	-0.5	0.0	0.0	-74.9
Fire Pump Building - Side 4	-8.5	-23.3	0.0	3.0	630.0	-67.0	1.8	-6.4	-0.5	0.0	0.0	-77.7
Fuel Gas Dewpoint Heater	102.2	85.3	0.0	0.0	795.5	-68.0	3.9	-28.8	-15.5	0.0	0.0	-7.2
Fuel Gas Metering and Regulating Station	93.0	93.0	0.0	0.0	798.2	-69.0	3.9	-28.7	-8.8	0.0	0.0	-9.7
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	645.0	-67.2	3.0	-26.6	-3.1	0.0	0.0	-1.0
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	748.2	-68.5	3.2	-28.0	-4.1	0.0	0.0	-4.4
Gas Aftercooler 1	101.0	84.0	0.0	0.0	806.0	-69.1	3.2	-27.6	-3.9	0.0	0.0	3.6
Gas Aftercooler 2	101.0	83.9	0.0	0.0	809.0	-69.2	3.2	-27.7	-4.0	0.0	0.0	3.4
Gas Compressor Bldg Louvers - E	105.7	98.0	0.0	3.0	784.3	-68.9	2.9	-27.1	-3.1	0.0	0.0	12.6
Gas Compressor Bldg Louvers - N	105.7	98.0	0.0	3.0	790.8	-69.0	2.9	-27.3	-3.3	0.0	0.0	12.0
Gas Compressor Bldg Louvers - S	105.7	98.0	0.0	3.0	791.0	-69.0	2.9	-27.6	-3.6	0.0	0.0	11.6
Gas Compressor Bldg Louvers - W	105.7	98.0	0.0	3.0	797.4	-69.0	2.9	-27.6	-3.6	0.0	0.0	11.5
Gas Compressor Building - East Side	99.1	76.7	0.0	3.0	784.1	-68.9	1.7	-16.1	-0.3	0.0	0.0	18.5
Gas Compressor Building - North Side	97.5	76.7	0.0	3.0	788.6	-68.9	1.7	-16.6	-0.3	0.0	0.0	16.4
Gas Compressor Building - Roof	101.0	76.7	0.0	0.0	791.0	-69.0	1.2	-17.7	-0.4	0.0	0.0	15.1
Gas Compressor Building - South Side	97.5	76.7	0.0	3.0	793.2	-69.0	1.7	-19.5	-0.3	0.0	0.0	13.4
Gas Compressor Building - West Side	99.1	76.7	0.0	3.0	797.6	-69.0	1.7	-21.3	-0.4	0.0	0.0	13.1
GSU 1 - Side 1	94.0	75.7	0.0	3.0	723.0	-68.2	2.1	-26.4	-1.7	0.0	1.4	4.2
GSU 1 - Side 2	94.0	78.0	0.0	3.0	714.6	-68.1	2.1	-25.1	-1.5	0.0	0.2	4.7
GSU 1 - Side 3	94.0	75.7	0.0	3.0	720.1	-68.1	2.1	-26.3	-1.6	0.0	1.5	4.6
GSU 1 - Side 4	94.0	78.0	0.0	3.0	728.5	-68.2	2.1	-26.5	-1.8	0.0	2.5	5.2
GSU 1 - Top	94.0	72.9	0.0	0.0	721.4	-68.2	1.8	-23.9	-1.3	0.0	1.7	4.2
GSU 2 - Side 1	94.0	75.7	0.0	3.0	623.4	-68.9	1.6	-13.1	-1.2	0.0	0.3	17.7
GSU 2 - Side 2	94.0	78.0	0.0	3.0	615.0	-66.8	1.2	-1.9	-2.6	0.0	0.0	27.0
GSU 2 - Side 3	94.0	75.7	0.0	3.0	620.1	-66.8	1.6	-6.8	-2.1	0.0	0.5	23.3
GSU 2 - Side 4	94.0	78.0	0.0	3.0	628.6	-67.0	1.7	-18.3	-1.0	0.0	2.0	14.4
GSU 2 - Top	94.0	72.9	0.0	0.0	621.5	-66.9	1.1	-6.3	-1.7	0.0	1.7	22.0
HRSG 1 - Body - Side 1	97.0	66.6	0.0	3.0	730.9	-68.3	0.7	-16.6	-0.4	0.0	0.0	15.5
HRSG 1 - Body - Side 2	97.0	66.6	0.0	3.0	720.4	-68.1	0.7	-4.2	-0.7	0.0	0.0	27.8
HRSG 1 - Exhaust Stack	102.4	102.4	0.0	0.0	724.6	-68.2	2.0	0.0	-0.4	0.0	0.0	32.3
HRSG 1 - Piping and Valves	98.5	80.0	0.0	0.0	744.6	-68.4	0.5	-17.1	-0.5	0.0	0.2	13.1
HRSG 1 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	721.3	-68.2	2.0	-0.8	-0.1	0.0	0.0	1.5



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Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HRSG 1 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	719.5	-68.1	2.0	-1.5	-0.2	0.0	0.0	0.8
HRSG 1 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	719.1	-68.1	2.0	-3.4	-0.2	0.0	0.0	-1.2
HRSG 1 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	720.4	-68.1	2.0	-3.7	-0.2	0.0	0.0	-1.5
HRSG 1 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	722.6	-68.2	2.0	-4.4	-0.2	0.0	0.0	-2.2
HRSG 1 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	724.4	-68.2	2.0	-6.2	-0.1	0.0	0.0	-3.9
HRSG 1 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	724.7	-68.2	2.0	-6.9	-0.1	0.0	0.0	-4.7
HRSG 1 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	723.5	-68.2	2.0	-8.5	-0.2	0.0	0.0	-6.3
HRSG 1 - T1 - Side 1	96.6	81.2	0.0	3.0	734.5	-68.3	1.7	-18.1	-0.4	0.0	0.5	15.1
HRSG 1 - T1 - Side 2	96.6	81.2	0.0	3.0	727.2	-68.2	1.6	-11.1	-0.4	0.0	0.0	22.6
HRSG 1 - T1 - Top	96.6	82.8	0.0	0.0	731.2	-68.3	1.0	-13.0	-0.4	0.0	2.1	18.0
HRSG 1 - T2 - Side 1	96.6	76.2	0.0	3.0	734.5	-68.3	1.0	-17.5	-0.4	0.0	0.1	14.5
HRSG 1 - T2 - Side 2	96.6	76.2	0.0	3.0	725.7	-68.2	1.0	-8.3	-0.4	0.0	0.0	23.8
HRSG 1 - T2 - Top	96.6	80.4	0.0	0.0	730.5	-68.3	-0.1	-7.5	-0.5	0.0	0.0	20.6
HRSG 2 - Body - Side 1	97.0	66.6	0.0	3.0	626.6	-66.9	0.4	-15.8	-0.3	0.0	0.0	17.5
HRSG 2 - Body - Side 2	97.0	66.6	0.0	3.0	616.2	-66.8	0.5	-1.3	-0.7	0.0	0.0	31.8
HRSG 2 - Exhaust Stack	102.4	102.4	0.0	0.0	620.3	-66.8	1.7	0.0	-0.3	-3.6	0.0	33.4
HRSG 2 - Piping and Valves	98.5	80.1	0.0	0.0	640.8	-67.1	0.2	-13.2	-0.5	0.0	2.7	20.6
HRSG 2 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	616.7	-66.8	1.9	-0.8	-0.1	0.0	0.0	2.7
HRSG 2 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	614.9	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.3
HRSG 2 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	614.4	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	615.5	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	617.8	-66.8	1.9	-4.4	-0.1	0.0	0.0	-0.9
HRSG 2 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	619.6	-66.8	1.9	-6.1	-0.1	0.0	0.0	-2.6
HRSG 2 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	620.0	-66.8	1.9	-7.0	-0.1	0.0	0.0	-3.5
HRSG 2 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	618.9	-66.8	1.9	-7.8	-0.1	0.0	0.0	-4.3
HRSG 2 - T1 - Side 1	96.6	81.2	0.0	3.0	631.2	-67.0	1.0	-10.7	-0.2	0.0	0.5	23.2
HRSG 2 - T1 - Side 2	96.6	81.2	0.0	3.0	624.0	-66.9	1.2	-3.9	-0.9	0.0	2.0	31.2
HRSG 2 - T1 - Top	96.6	82.8	0.0	0.0	627.9	-66.9	0.7	-5.4	-0.4	0.0	2.4	27.0
HRSG 2 - T2 - Side 1	96.6	76.2	0.0	3.0	631.1	-67.0	0.6	-12.3	-0.3	0.0	0.1	20.8
HRSG 2 - T2 - Side 2	96.6	76.2	0.0	3.0	622.3	-66.9	0.7	-1.8	-0.7	0.0	0.7	31.6
HRSG 2 - T2 - Top	96.6	80.4	0.0	0.0	627.4	-66.9	0.0	-6.0	-0.6	0.0	0.7	23.7
HRSG Recirc Pump 1	93.0	93.0	0.0	0.0	711.2	-68.0	3.1	-26.3	-2.6	0.0	8.1	7.3



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Clear River Energy Center - Mean Propagation Typical Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HFSG Rectic Pump 2	93.0	93.0	0.0	0.0	606.4	-66.6	2.8	-7.3	-3.6	0.0	2.2	20.6
Isolation Transformer 1	80.0	80.0	0.0	0.0	703.7	-67.9	2.1	-25.4	-1.3	0.0	8.5	-3.9
Isolation Transformer 2	80.0	80.0	0.0	0.0	601.3	-66.6	1.2	-2.9	-2.8	0.0	2.4	11.4
Rooftop Vent Fan - Admin 1	87.8	87.8	0.0	0.0	569.5	-66.1	2.7	-4.4	-4.9	0.0	0.0	15.2
Rooftop Vent Fan - Admin 2	87.8	87.8	0.0	0.0	612.2	-66.7	2.8	-7.5	-2.7	0.0	0.0	13.7
Rooftop Vent Fan - Admin 3	87.8	87.8	0.0	0.0	589.4	-66.4	2.8	-7.5	-2.7	0.0	0.0	13.9
Rooftop Vent Fan - Admin 4	87.8	87.8	0.0	0.0	614.6	-66.8	2.8	-7.6	-2.8	0.0	1.4	14.9
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	670.7	-67.5	2.8	-2.0	-5.1	0.0	0.0	16.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	753.2	-68.5	3.0	-6.0	-2.7	0.0	0.0	13.6
Rooftop Vent Fan - CTG Bldg 1	87.8	87.8	0.0	0.0	735.3	-68.3	3.0	-6.8	-2.7	0.0	0.0	12.9
Rooftop Vent Fan - CTG Bldg 2	87.8	87.8	0.0	0.0	724.3	-68.2	2.9	-6.5	-2.7	0.0	0.0	13.3
Rooftop Vent Fan - CTG Bldg 3	87.8	87.8	0.0	0.0	728.3	-68.2	2.9	-3.1	-3.4	0.0	0.0	16.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.8	0.0	0.0	632.6	-67.0	2.7	-7.4	-2.9	0.0	0.0	13.2
Rooftop Vent Fan - CTG Bldg 5	87.8	87.8	0.0	0.0	627.4	-66.9	2.7	-0.7	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - CTG Bldg 6	87.8	87.8	0.0	0.0	622.8	-66.9	2.7	-0.8	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.8	0.0	0.0	790.3	-68.9	3.1	-17.9	-1.3	0.0	0.0	2.7
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.8	0.0	0.0	791.8	-69.0	3.1	-16.6	-1.5	0.0	0.0	1.9
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.8	0.0	0.0	793.1	-69.0	3.1	-18.3	-1.5	0.0	0.0	2.2
Rooftop Vent Fan - STG Bldg 1	87.8	87.8	0.0	0.0	668.3	-67.4	2.8	-7.5	-2.9	0.0	0.0	12.8
Rooftop Vent Fan - STG Bldg 2	87.8	87.8	0.0	0.0	634.0	-67.0	2.7	-0.7	-4.1	0.0	0.0	18.7
Rooftop Vent Fan - STG Bldg 3	87.8	87.8	0.0	0.0	645.9	-67.2	2.7	-7.5	-2.9	0.0	0.0	12.9
Rooftop Vent Fan - STG Bldg 4	87.8	87.8	0.0	0.0	735.2	-68.3	2.9	-7.2	-2.9	0.0	0.0	12.3
Rooftop Vent Fan - STG Bldg 5	87.8	87.8	0.0	0.0	758.9	-68.6	3.0	-7.8	-3.1	0.0	0.0	11.3
Rooftop Vent Fan - STG Bldg 6	87.8	87.8	0.0	0.0	746.0	-68.4	3.0	-7.1	-2.8	0.0	0.0	12.3
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.8	0.0	0.0	700.5	-67.9	3.0	-7.7	-3.0	0.0	0.0	12.1
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.8	0.0	0.0	680.5	-67.6	3.0	-7.1	-2.7	0.0	0.0	13.3
Safety Vent	28.0	29.0	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-8.2	0.7	-51.9
Scanner Cooling Air Blower 1	93.1	93.1	0.0	0.0	728.1	-68.2	3.2	-5.0	-3.8	0.0	0.0	19.2
Scanner Cooling Air Blower 2	93.1	93.1	0.0	0.0	624.3	-66.9	2.9	-0.1	-4.5	0.0	0.0	24.5
Service Water Pump	93.1	93.1	0.0	0.0	662.7	-67.4	3.0	-26.9	-2.9	0.0	0.3	-0.7
Startup Vent - Aux Boiler Blowdown	114.2	114.2	0.0	0.0	680.1	-67.6	1.3	0.0	-8.4	-8.0	0.0	31.5
Startup Vent - Aux Boiler Startup	114.2	114.2	0.0	0.0	683.5	-67.7	1.3	0.0	-8.4	-8.0	0.0	31.4



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Startup Vent - HRSG Blowdown 1	114.2	114.2	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-8.2	0.7	33.2
Startup Vent - HRSG Blowdown 2	114.2	114.2	0.0	0.0	713.7	-68.1	1.3	0.0	-8.5	-7.8	0.6	31.7
Startup Vent - Steam Turbine Drains Tank	114.2	114.2	0.0	0.0	653.9	-67.3	2.6	-0.1	-8.6	-8.6	0.0	32.2
Steam Turbine Bldg 1 - East Facade	92.4	64.9	0.0	3.0	726.9	-68.2	1.2	-7.6	-0.3	0.0	0.0	20.5
Steam Turbine Bldg 1 - North Facade	90.7	64.9	0.0	3.0	757.1	-68.6	1.2	-14.8	-0.3	0.0	0.0	11.2
Steam Turbine Bldg 1 - Roof	88.8	59.9	0.0	0.0	746.8	-68.5	0.2	-6.2	-0.5	0.0	0.2	14.1
Steam Turbine Bldg 1 - South Facade	95.7	64.9	0.0	3.0	748.9	-68.5	1.2	-15.0	-0.2	0.0	0.0	16.3
Steam Turbine Bldg 2 - East Facade	92.4	64.9	0.0	3.0	765.7	-68.7	1.2	-18.3	-0.3	0.0	0.0	9.4
Steam Turbine Bldg 2 - North Facade	90.7	64.9	0.0	3.0	626.1	-66.9	0.9	-1.0	-0.4	0.0	0.0	28.0
Steam Turbine Bldg 2 - Roof	88.8	59.9	0.0	0.0	655.2	-67.3	1.0	-10.1	-0.2	0.0	0.0	17.0
Steam Turbine Bldg 2 - South Facade 1	95.7	64.9	0.0	3.0	645.7	-67.2	0.2	-4.9	-0.5	0.0	0.0	16.4
Steam Turbine Bldg 2 - South Facade 2	92.4	64.9	0.0	3.0	647.9	-67.2	0.9	-9.2	-0.2	0.0	0.1	23.0
STG Building 1 Vent Louvers - East	89.3	76.8	0.0	3.0	664.1	-67.4	1.0	-16.7	-0.2	0.0	0.0	12.0
STG Building 1 Vent Louvers - South 1	89.3	76.8	0.0	3.0	726.6	-68.2	1.4	-14.1	-1.0	0.0	0.0	10.4
STG Building 1 Vent Louvers - South 2	89.3	76.8	0.0	3.0	758.9	-68.6	1.5	-21.6	-1.4	0.0	0.0	2.2
STG Building 1 Vent Louvers - West	89.3	76.8	0.0	3.0	737.1	-68.3	1.4	-20.4	-1.3	0.0	0.0	3.7
STG Building 2 Vent Louvers - East	89.3	76.8	0.0	3.0	765.8	-68.7	1.5	-24.0	-1.8	0.0	0.7	0.0
STG Building 2 Vent Louvers - South 1	89.3	76.8	0.0	3.0	625.6	-66.9	1.0	0.0	-3.0	0.0	0.0	23.5
STG Building 2 Vent Louvers - South 2	89.3	76.8	0.0	3.0	657.9	-67.4	1.1	-17.2	-1.1	0.0	0.0	7.8
STG Building 2 Vent Louvers - West	89.3	76.8	0.0	3.0	636.5	-67.1	1.1	-13.2	-1.2	0.0	0.0	12.0
STW Heat Exchanger 1	102.0	90.9	0.0	0.0	664.2	-67.4	1.2	-23.4	-1.5	0.0	0.0	1.1
STW Heat Exchanger 2	102.0	90.9	0.0	0.0	747.9	-68.5	3.1	-28.0	-4.2	0.0	0.0	4.5
Waste Water Pump	93.1	93.1	0.0	0.0	645.2	-67.2	2.8	-26.0	-3.1	0.0	0.0	8.5
Water Treatment Building - East Side	78.9	56.7	0.0	3.0	669.7	-67.5	3.1	-25.8	-2.3	0.0	0.0	0.5
Water Treatment Building - North Side	83.3	56.7	0.0	3.0	660.8	-67.4	1.5	-6.1	-0.5	0.0	0.0	9.5
Water Treatment Building - Roof	86.4	56.7	0.0	0.0	684.3	-67.7	1.5	-4.5	-0.5	0.0	0.0	15.1
Water Treatment Building - South Side	83.3	56.7	0.0	3.0	685.7	-67.7	0.9	-5.6	-0.6	0.0	0.0	13.5
Water Treatment Building - West Side	78.9	56.7	0.0	3.0	684.8	-67.7	1.5	-14.9	-0.3	0.0	0.0	4.8
WTB Ventilation Louvers - North Side	90.0	78.0	0.0	3.0	711.6	-68.0	1.6	-15.1	-0.3	0.0	0.0	0.0
WTB Ventilation Louvers - South Side	90.0	78.0	0.0	3.0	679.3	-67.6	2.6	-5.2	-3.1	0.0	0.0	19.6
					693.0	-67.8	2.6	-22.9	-2.1	0.0	0.0	2.9



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Emergency Shutdown

**Clear River Energy Center - Receiver Sound Levels
Emergency Shutdown Analysis - A-Weight - ISO9613**

Name	SPL dB(A)
M1 - Walum Lake Road	50.2
M2 - Jackson Schoolhouse Road (East)	50.0
M3 - Dos Crossing Drive	44.5
M4 - Buck Hill Road	44.4
M5 - Jackson Schoolhouse Road (South)	41.1



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**Clear River Energy Center - Receiver Spectra
Emergency Shutdown Analysis - A-Weight - ISO9613**

31Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver M1 - Wallum Lake Road								
67.0	64.5	59.4	54.1	44.2	38.9	41.9	26.7	-28.1
Receiver M2 - Jackson Schoolhouse Road (East)								
69.6	66.3	59.6	54.0	46.7	37.6	35.3	13.9	
Receiver M3 - Doe Crossing Drive								
62.6	60.0	53.8	49.4	39.8	32.6	29.2	-3.1	
Receiver M4 - Buck Hill Road								
62.7	61.2	54.0	48.9	39.3	33.3	28.2	-7.0	
Receiver M5 - Jackson Schoolhouse Road (South)								
61.8	58.6	51.4	45.6	36.6	25.8	17.4	-27.2	



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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 1 Duct - Finger 1 A	89.9	66.00	Area	0	247.24	107.5	103.2	99.1	93.7	88.3	78.0	72.8	62.1	-15.9
ACC 1 Duct - Finger 1 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - Finger 1 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - Finger 2 A	90.0	66.00	Area	0	249.06	107.5	103.3	99.2	93.7	88.3	78.1	72.9	62.1	-15.8
ACC 1 Duct - Finger 2 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - Finger 2 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - Finger 3 A	90.0	66.00	Area	0	250.50	107.5	103.3	99.2	93.7	88.3	78.1	72.9	62.1	-15.8
ACC 1 Duct - Finger 3 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - Finger 3 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 1 Duct - HRH Bypass Bell A	99.8	88.00	Area	0	15.17	117.3	113.1	109.0	103.5	98.1	87.9	82.7	71.9	-6.0
ACC 1 Duct - HRH Bypass Bell B	99.8	88.00	Area	0	15.18	117.3	113.1	109.0	103.5	98.1	87.9	82.7	71.9	-6.0
ACC 1 Duct - HRH Bypass Bell C	99.9	88.00	Area	0	15.37	117.4	113.2	109.1	103.6	98.2	88.0	82.8	72.0	-5.9
ACC 1 Duct - HRH Bypass Bell D	99.6	88.00	Area	0	14.54	117.2	112.9	108.8	103.3	98.0	87.7	82.5	71.7	-6.2
ACC 1 Duct - HRH Bypass Bell E	99.9	88.00	Area	0	15.34	117.4	113.1	109.1	103.6	98.2	88.0	82.8	72.0	-5.9
ACC 1 Duct - HRH Bypass Tube A	88.6	85.00	Area	0	2.28	106.1	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 1 Duct - HRH Bypass Tube B	88.6	85.00	Area	0	2.29	106.1	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 1 Duct - HRH Bypass Tube C	88.6	85.00	Area	0	2.29	106.1	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 1 Duct - HRH Bypass Tube D	88.6	85.00	Area	0	2.28	106.1	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 1 Duct - LP Bypass Bell A	94.8	83.00	Area	0	15.17	112.3	108.1	104.0	98.5	93.1	82.9	77.7	66.9	-11.0
ACC 1 Duct - LP Bypass Bell B	94.8	83.00	Area	0	15.18	112.3	108.1	104.0	98.5	93.1	82.9	77.7	66.9	-11.0
ACC 1 Duct - LP Bypass Bell C	94.9	83.00	Area	0	15.37	112.4	108.2	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 1 Duct - LP Bypass Bell D	94.6	83.00	Area	0	14.54	112.2	107.9	103.8	98.3	93.0	82.7	77.5	66.7	-11.2
ACC 1 Duct - LP Bypass Bell E	94.9	83.00	Area	0	15.34	112.4	108.1	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 1 Duct - LP Bypass Tube A	83.6	80.00	Area	0	2.30	101.2	96.9	92.8	87.3	81.9	71.7	66.5	55.7	-22.2
ACC 1 Duct - LP Bypass Tube B	83.6	80.00	Area	0	2.30	101.2	96.9	92.8	87.3	82.0	71.7	66.5	55.7	-22.2
ACC 1 Duct - LP Bypass Tube C	83.6	80.00	Area	0	2.30	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.7	-22.2
ACC 1 Duct - LP Bypass Tube D	83.6	80.00	Area	0	2.30	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.7	-22.2
ACC 1 Duct - Main A	107.4	86.00	Area	0	136.57	124.9	120.6	116.5	111.1	105.7	95.4	90.2	79.5	1.6
ACC 1 Duct - Main B	101.7	86.00	Area	0	37.17	119.2	115.0	110.9	105.4	100.0	89.8	84.6	73.8	-4.1
ACC 1 Duct - Main C	105.1	86.00	Area	0	80.99	122.6	118.4	114.3	108.8	103.4	93.2	88.0	77.2	-0.7
ACC 1 Duct - Main D	101.7	86.00	Area	0	37.41	119.3	115.0	110.9	105.5	100.1	89.8	84.6	73.9	-4.1
ACC 1 Duct - Main E	99.0	86.00	Area	0	19.86	116.5	112.3	108.2	102.7	97.3	87.1	81.9	71.1	-6.8



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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Duct - Main F	98.6	86.00	Area	0	18.21	116.1	111.9	107.8	102.3	96.9	86.7	81.5	70.7	-7.2
ACC 1 Duct - Main G	105.1	86.00	Area	0	81.62	122.7	118.4	114.3	108.8	103.4	93.2	88.0	77.2	-0.7
ACC 1 Duct - Main H	107.4	86.00	Area	0	136.57	124.9	120.6	116.5	111.1	105.7	95.4	90.2	79.5	1.6
ACC 1 Duct - Main M	98.9	86.00	Area	0	19.41	116.4	112.2	108.1	102.6	97.2	87.0	81.8	71.0	-6.9
ACC 1 Duct - Main N	107.5	86.00	Area	0	142.12	125.1	120.8	116.7	111.3	105.9	95.6	90.4	79.6	1.7
ACC 1 Duct - Main O	106.8	86.00	Area	0	120.75	124.4	120.1	116.0	110.5	105.1	94.9	89.7	78.9	1.0
ACC 1 Duct - Main P	106.8	86.00	Area	0	121.31	124.4	120.1	116.0	110.6	105.2	94.9	89.7	79.0	1.0
ACC 1 Duct - Main Q	106.9	86.00	Area	0	121.95	124.4	120.2	116.1	110.6	105.2	95.0	89.8	79.0	1.1
ACC 1 Duct - Main R	99.4	86.00	Area	0	21.64	116.9	112.6	108.5	103.1	97.7	87.4	82.2	71.5	-6.4
ACC 1 Duct - Main S	99.2	86.00	Area	0	21.04	116.8	112.5	108.4	103.0	97.6	87.3	82.1	71.4	-6.6
ACC 1 Duct - Riser 1 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 1 B	94.1	76.00	Area	0	64.21	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Duct - Riser 1 C	94.0	76.00	Area	0	63.57	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 1 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Duct - Riser 2 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 2 B	94.1	76.00	Area	0	64.21	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Duct - Riser 2 C	94.0	76.00	Area	0	63.56	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 2 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Duct - Riser 3 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 3 B	94.1	76.00	Area	0	64.20	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Duct - Riser 3 C	94.0	76.00	Area	0	63.58	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 1 Duct - Riser 3 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 1 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Duct - Finger 1 A	89.9	66.00	Area	0	247.24	107.5	103.2	99.1	93.7	88.3	78.0	72.8	62.1	-15.9
ACC 2 Duct - Finger 1 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 2 Duct - Finger 1 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 2 Duct - Finger 2 A	90.0	66.00	Area	0	249.06	107.5	103.3	99.2	93.7	88.3	78.1	72.9	62.1	-15.8
ACC 2 Duct - Finger 2 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 2 Duct - Finger 2 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 2 Duct - Finger 3 A	90.0	66.00	Area	0	250.50	107.5	103.3	99.2	93.7	88.3	78.1	72.9	62.1	-15.8
ACC 2 Duct - Finger 3 B	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9
ACC 2 Duct - Finger 3 C	89.9	66.00	Area	0	245.91	107.4	103.2	99.1	93.6	88.2	78.0	72.8	62.0	-15.9

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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - HRH Bypass Bell A	99.8	88.00	Area	0	15.18	117.3	113.1	109.0	103.5	98.1	87.9	82.7	71.9	-6.0
ACC 2 Duct - HRH Bypass Bell B	99.8	88.00	Area	0	15.18	117.3	113.1	109.0	103.5	98.1	87.9	82.7	71.9	-6.0
ACC 2 Duct - HRH Bypass Bell C	99.9	88.00	Area	0	15.37	117.4	113.2	109.1	103.6	98.2	88.0	82.8	72.0	-5.9
ACC 2 Duct - HRH Bypass Bell D	99.6	88.00	Area	0	14.54	117.2	112.9	108.8	103.4	98.0	87.7	82.5	71.7	-6.2
ACC 2 Duct - HRH Bypass Bell E	99.9	88.00	Area	0	15.34	117.4	113.1	109.1	103.6	98.2	88.0	82.8	72.0	-5.9
ACC 2 Duct - HRH Bypass Tube A	88.6	85.00	Area	0	2.30	106.2	101.9	97.8	92.3	87.0	76.7	71.5	60.7	-17.2
ACC 2 Duct - HRH Bypass Tube B	88.6	85.00	Area	0	2.30	106.1	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 2 Duct - HRH Bypass Tube C	88.6	85.00	Area	0	2.30	106.2	101.9	97.8	92.3	86.9	76.7	71.5	60.7	-17.2
ACC 2 Duct - HRH Bypass Tube D	88.6	85.00	Area	0	2.30	106.2	101.9	97.8	92.3	87.0	76.7	71.5	60.7	-17.2
ACC 2 Duct - LP Bypass Bell A	94.8	83.00	Area	0	15.18	112.3	108.1	104.0	98.5	93.1	82.9	77.7	66.9	-11.0
ACC 2 Duct - LP Bypass Bell B	94.8	83.00	Area	0	15.18	112.3	108.1	104.0	98.5	93.1	82.9	77.7	66.9	-11.0
ACC 2 Duct - LP Bypass Bell C	94.9	83.00	Area	0	15.37	112.4	108.2	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 2 Duct - LP Bypass Bell D	94.6	83.00	Area	0	14.54	112.2	107.9	103.8	98.4	93.0	82.7	77.5	66.7	-11.2
ACC 2 Duct - LP Bypass Bell E	94.9	83.00	Area	0	15.34	112.4	108.1	104.1	98.6	93.2	83.0	77.8	67.0	-10.9
ACC 2 Duct - LP Bypass Tube A	83.6	80.00	Area	0	2.31	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.8	-22.2
ACC 2 Duct - LP Bypass Tube B	83.6	80.00	Area	0	2.31	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.8	-22.2
ACC 2 Duct - LP Bypass Tube C	83.6	80.00	Area	0	2.31	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.8	-22.2
ACC 2 Duct - LP Bypass Tube D	83.6	80.00	Area	0	2.31	101.2	96.9	92.8	87.4	82.0	71.7	66.5	55.8	-22.2
ACC 2 Duct - Main A	103.2	86.00	Area	0	52.37	120.7	116.5	112.4	106.9	101.5	91.3	86.1	75.3	-2.6
ACC 2 Duct - Main B	101.6	86.00	Area	0	36.49	119.2	114.9	110.8	105.3	99.9	89.7	84.5	73.7	-4.2
ACC 2 Duct - Main D	101.8	86.00	Area	0	37.90	119.3	115.1	111.0	105.5	100.1	89.9	84.7	73.9	-4.0
ACC 2 Duct - Main E	98.6	86.00	Area	0	18.33	116.2	111.9	107.8	102.4	97.0	86.7	81.5	70.8	-7.2
ACC 2 Duct - Main F	98.2	86.00	Area	0	16.54	115.7	111.5	107.4	101.9	96.5	86.3	81.1	70.3	-7.6
ACC 2 Duct - Main H	103.2	86.00	Area	0	52.36	120.7	116.5	112.4	106.9	101.5	91.3	86.1	75.3	-2.6
ACC 2 Duct - Main M	98.9	86.00	Area	0	19.41	116.4	112.2	108.1	102.6	97.2	87.0	81.8	71.0	-6.9
ACC 2 Duct - Main N	107.5	86.00	Area	0	142.12	125.1	120.8	116.7	111.3	105.9	95.6	90.4	79.6	1.7
ACC 2 Duct - Main O	106.8	86.00	Area	0	121.31	124.4	120.1	116.0	110.6	105.2	94.9	89.7	79.0	1.0
ACC 2 Duct - Main P	106.8	86.00	Area	0	120.75	124.4	120.1	116.0	110.5	105.1	94.9	89.7	78.9	1.0
ACC 2 Duct - Main Q	99.4	86.00	Area	0	21.64	116.9	112.6	108.5	103.1	97.7	87.4	82.2	71.5	-6.4
ACC 2 Duct - Main R	99.2	86.00	Area	0	21.01	116.8	112.5	108.4	102.9	97.6	87.3	82.1	71.3	-6.6
ACC 2 Duct - Main S	106.9	86.00	Area	0	121.95	124.4	120.2	116.1	110.6	105.2	95.0	89.8	79.0	1.1
ACC 2 Duct - Riser 1 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 1 B	94.1	76.00	Area	0	64.21	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7



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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 2 Duct - Riser 1 C	94.0	76.00	Area	0	63.57	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 1 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 2 Duct - Riser 2 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 2 B	94.1	76.00	Area	0	64.21	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 2 Duct - Riser 2 C	94.0	76.00	Area	0	63.56	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 2 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 2 Duct - Riser 3 A	94.0	76.00	Area	0	63.74	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 3 B	94.1	76.00	Area	0	64.20	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 2 Duct - Riser 3 C	94.0	76.00	Area	0	63.58	111.6	107.3	103.2	97.8	92.4	82.1	76.9	66.2	-11.8
ACC 2 Duct - Riser 3 D	94.1	76.00	Area	0	64.39	111.6	107.4	103.3	97.8	92.4	82.2	77.0	66.2	-11.7
ACC 2 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACHE 1	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
ACHE 2	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Ammonia Forwarding Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Ammonia Injection Skid 1	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Ammonia Injection Skid 2	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Aux Boiler Building - East Side	88.0	64.26	Area	3	234.94	108.8	102.7	100.7	91.7	81.7	68.7	57.7	51.7	43.7
Aux Boiler Building - North Side	88.5	64.26	Area	3	288.09	108.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - Roof	91.9	64.26	Area	0	579.10	112.7	106.6	104.6	95.7	85.7	72.6	61.6	55.7	47.6
Aux Boiler Building - South Side	88.5	64.26	Area	3	288.09	108.3	103.3	101.3	92.3	82.3	69.3	58.3	52.3	44.3
Aux Boiler Building - West Side	88.0	64.26	Area	3	235.85	108.8	102.7	100.7	91.8	81.8	68.7	57.7	51.8	43.7
Aux Boiler Building Vent Louvers - North	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler Building Vent Louvers - South	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler FD Fan Inlet	100.0	100.00	Point	0		102.3	102.8	101.7	101.7	98.8	94.8	87.8	80.8	75.7
Aux Boiler Stack Exhaust	100.0	100.00	Point	0		102.2	102.2	100.2	99.2	97.2	93.2	90.2	87.2	94.2
Aux Transformer 1 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.5	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Top	82.0	66.90	Area	0	32.39	78.7	84.5	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.5	86.6	81.7	81.7	75.6	70.6	65.7	58.6

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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Aux Transformer 2 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
BFW Pump Enclosure 1-Side 1	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 2	97.2	76.92	Area	3	107.28	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Side 3	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Top	103.5	76.92	Area	0	452.03	119.5	116.9	113.9	108.9	96.9	90.9	86.9	78.9	72.9
BFW Pump Enclosure 2-Side 1	94.4	76.92	Area	3	55.67	110.4	107.8	104.8	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 2	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Side 3	94.4	76.92	Area	3	55.43	110.4	107.8	104.7	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Top	103.4	76.92	Area	0	445.84	119.4	116.9	113.8	108.8	96.9	90.9	86.9	78.9	72.8
Condensate Equipment Bldg 1 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 1 - North Side	75.2	56.70	Area	3	70.14	88.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - Roof	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 1 - South Side	75.2	56.70	Area	3	70.14	88.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - North Side	75.2	56.70	Area	3	70.14	88.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - Roof	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 2 - South Side	75.2	56.70	Area	3	70.14	88.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
CTG 1 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG 2 - Turbine Compartment Vent Fan	103.8	103.79	Point	0		101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG Air Inlet 1	106.2	82.90	Area	0	213.41	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet 2	106.2	82.93	Area	0	211.99	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet Duct 1 - North	99.9	84.40	Area	0	35.83	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - South	99.9	84.44	Area	0	35.50	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - Top	99.9	83.26	Area	0	46.57	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - North	99.9	84.32	Area	0	36.52	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - South	99.9	84.29	Area	0	36.74	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0

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CTG Air Inlet Duct 2 - Top	99.9	83.15	Area	0	47.70	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Building 1 - East Facade	95.1	64.70	Area	3	1101.55	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 - North Facade	94.0	64.70	Area	3	851.17	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 1 - Roof	89.9	59.70	Area	0	1047.08	111.5	105.3	104.6	89.6	78.8	68.5	64.2	61.3	52.4
CTG Building 1 - West Facade	95.1	64.70	Area	3	1100.83	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 1 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 1 Vent Louvers - West	70.1	57.55	Area	3	18.00	96.3	87.6	84.9	85.9	54.1	42.8	37.5	36.6	30.7
CTG Building 2 - East Facade	95.1	64.70	Area	3	1100.24	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 - North Facade	94.0	64.70	Area	3	852.46	115.6	109.4	108.7	93.7	82.9	72.6	68.3	65.4	56.5
CTG Building 2 - Roof	89.9	59.70	Area	0	1045.75	111.5	105.3	104.6	89.6	78.8	68.5	64.2	61.3	52.4
CTG Building 2 - West Facade	95.1	64.70	Area	3	1098.21	116.7	110.5	109.8	94.8	84.0	73.7	69.4	66.5	57.6
CTG Building 2 Vent Louvers - East	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - North	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
CTG Building 2 Vent Louvers - West	89.6	77.00	Area	3	18.00	100.3	95.6	96.9	83.9	83.1	79.8	80.5	84.6	75.7
Demin Water Pump	93.1	93.10	Point	0	86.0	86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Duct Burner Skid 1	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Duct Burner Skid 2	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Emergency Diesel Generator - Side 1	8.2	-7.75	Area	3	38.95	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Side 2	8.2	-7.76	Area	3	39.02	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Top	8.2	-8.56	Area	0	46.93	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Excitation Transformer 1	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Excitation Transformer 2	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Fire Pump Building - Roof	-4.1	-23.30	Area	0	82.33	10.1	13.1	7.1	1.1	-12.9	-21.9	-28.9	-34.9	-35.9
Fire Pump Building - Side 1	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 2	-8.5	-23.30	Area	3	29.99	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fire Pump Building - Side 3	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Fire Pump Building - Side 4	-8.5	-23.30	Area	3	30.11	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fuel Gas Dewpoint Heater	102.2	85.30	Area	0	49.02	97.9	95.7	83.8	81.7	76.0	77.8	85.5	83.9	103.1
Fuel Gas Metering and Regulating Station	93.0	93.00	Point	0	-15.6	-15.6	-15.6	-15.6	72.4	74.4	79.4	89.4	87.4	79.4
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Gas Aftercooler 1	101.0	84.00	Area	0	50.09	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2

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Gas Aftercooler 2	101.0	83.86	Area	0	51.73	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2
Gas Compressor Bldg Louvers - E	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - N	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - S	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - W	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Building - East Side	99.1	76.70	Area	3	173.15	113.3	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
Gas Compressor Building - North Side	97.5	76.70	Area	3	119.51	111.7	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - Roof	101.0	76.70	Area	0	269.92	115.3	118.2	112.2	106.3	92.3	83.2	76.2	70.3	69.2
Gas Compressor Building - South Side	97.5	76.70	Area	3	120.04	111.8	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - West Side	99.1	76.70	Area	3	173.41	113.4	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
GSU 1 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 2	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 4	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Top	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
HRSG 1 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Body - Side 2	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Exhaust Stack	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 1 - Piping and Valves	98.5	80.00	Line	0	71.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 1 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - T1 - Side 1	66.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0



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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m.m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
HRSG 1 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 2 - Body - Side 2	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 2 - Exhaust Stack	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 2 - Piping and Valves	98.5	80.06	Line	0	70.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 2 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 8	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	98.0	85.0	88.0	75.0	58.0	41.0
HRSG Recirc Pump 1	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
HRSG Recirc Pump 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Isolation Transformer 1	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Isolation Transformer 2	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Rooftop Vent Fan - Admin 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0

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Clear River Energy Center - Source List Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m.m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Rooftop Vent Fan - CTG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Safety Vent	129.0	129.00	Point	0		113.4	120.9	127.0	128.0	118.0	110.8	121.9	123.0	124.0
Scanner Cooling Air Blower 1	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Scanner Cooling Air Blower 2	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Service Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Startup Vent - Aux Boiler Blowdown	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Aux Boiler Startup	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 1	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - HRSG Blowdown 2	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Startup Vent - Steam Turbine Drains Tank	114.2	114.17	Point	0		98.6	106.1	112.2	113.2	103.2	96.0	107.1	108.2	109.2
Steam Turbine Bldg 1 - East Facade	92.4	64.93	Area	3	554.75	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 1 - North Facade	90.7	64.93	Area	3	373.57	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9
Steam Turbine Bldg 1 - Roof	88.8	59.93	Area	0	764.72	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 1 - South Facade	95.7	64.93	Area	3	1208.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 1 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - East Facade	92.4	64.93	Area	3	553.90	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
Steam Turbine Bldg 2 - North Facade	90.7	64.93	Area	3	374.51	113.5	109.9	101.8	94.9	82.9	71.9	64.9	54.9	53.9



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**Clear River Energy Center - Source List
Emergency Shutdown Analysis - A-Weight - ISO9613**

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Steam Turbine Bldg 2 - Roof	88.8	59.93	Area	0	764.05	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 2 - South Facade 1	95.7	64.93	Area	3	1206.17	118.6	115.0	106.9	100.0	88.0	77.0	70.0	60.0	59.0
Steam Turbine Bldg 2 - West Facade	92.4	64.93	Area	3	552.09	115.2	111.6	103.5	96.6	84.6	73.6	66.6	56.6	55.6
STG Building 1 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - South 2	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 1 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - East	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 1	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - South 2	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STG Building 2 Vent Louvers - West	89.3	76.79	Area	3	18.00	101.8	99.7	93.6	88.7	86.7	82.7	80.7	77.7	76.7
STW Heat Exchanger 1	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	95.2	94.2	86.2
STW Heat Exchanger 2	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	95.2	94.2	86.2
Waste Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Water Treatment Building - East Side	78.9	56.70	Area	3	167.69	93.2	96.2	90.2	84.2	70.2	61.2	54.2	48.2	47.2
Water Treatment Building - North Side	83.3	56.70	Area	3	452.35	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - Roof	86.4	56.70	Area	0	939.65	100.7	103.6	97.6	91.7	77.7	68.6	61.6	55.7	54.7
Water Treatment Building - South Side	83.3	56.70	Area	3	453.24	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - West Side	78.9	56.70	Area	3	167.20	93.2	96.1	90.2	84.2	70.2	61.2	54.2	48.2	47.2
WTB Ventilation Louvers - North Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0
WTB Ventilation Louvers - South Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0



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Clear River Energy Center - Mean Propagation Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Receiver M1 - Wallum Lake Road												
ACC 1 Bottom	109.0	72.7	0.0	0.0	789.6	-68.9	1.0	-2.9	-3.2	-8.3	0.0	26.7
ACC 1 Duct - Finger 1 A	89.9	86.0	0.0	0.0	691.9	-67.8	-0.5	-4.2	-1.0	0.0	0.0	16.5
ACC 1 Duct - Finger 1 B	89.9	86.0	0.0	0.0	690.7	-67.8	-0.5	-1.0	-1.2	0.0	2.6	22.0
ACC 1 Duct - Finger 1 C	89.9	86.0	0.0	0.0	692.8	-67.8	-0.5	-7.2	-0.8	0.0	0.2	13.8
ACC 1 Duct - Finger 2 A	90.0	86.0	0.0	0.0	704.1	-67.9	-0.5	-4.3	-1.0	0.0	0.0	16.3
ACC 1 Duct - Finger 2 B	89.9	86.0	0.0	0.0	702.9	-67.9	-0.5	-4.3	-0.9	0.0	2.4	18.6
ACC 1 Duct - Finger 2 C	89.9	86.0	0.0	0.0	705.1	-68.0	-0.5	-11.0	-0.6	0.0	0.1	10.0
ACC 1 Duct - Finger 3 A	90.0	86.0	0.0	0.0	716.5	-68.1	-0.5	-4.3	-1.0	0.0	0.0	16.2
ACC 1 Duct - Finger 3 B	89.9	86.0	0.0	0.0	715.4	-68.1	-0.5	-4.5	-0.9	0.0	2.1	18.0
ACC 1 Duct - Finger 3 C	89.9	86.0	0.0	0.0	717.5	-68.1	-0.5	-8.0	-0.7	0.0	0.6	12.2
ACC 1 Duct - HRH Bypass Bell A	99.8	88.0	0.0	0.0	660.8	-67.4	0.6	-21.2	-0.5	0.0	0.0	11.3
ACC 1 Duct - HRH Bypass Bell B	99.8	88.0	0.0	0.0	660.7	-67.4	1.1	-19.4	-0.5	0.0	0.0	13.7
ACC 1 Duct - HRH Bypass Bell C	99.9	88.0	0.0	0.0	659.0	-67.4	0.8	-20.3	-0.5	0.0	1.3	13.8
ACC 1 Duct - HRH Bypass Bell D	99.6	88.0	0.0	0.0	660.0	-67.4	0.8	-13.1	-0.4	0.0	0.3	19.7
ACC 1 Duct - HRH Bypass Bell E	99.9	88.0	0.0	0.0	662.6	-67.4	0.8	-20.3	-0.4	0.0	2.0	14.5
ACC 1 Duct - HRH Bypass Tube A	88.6	85.0	0.0	0.0	659.4	-67.4	0.7	-13.0	-0.5	0.0	0.0	8.5
ACC 1 Duct - HRH Bypass Tube B	88.6	85.0	0.0	0.0	659.1	-67.4	0.8	-13.0	-0.5	0.0	0.2	8.7
ACC 1 Duct - HRH Bypass Tube C	88.6	85.0	0.0	0.0	659.7	-67.4	0.8	-17.2	-0.4	0.0	0.0	4.4
ACC 1 Duct - HRH Bypass Tube D	88.6	85.0	0.0	0.0	659.4	-67.4	0.8	-13.1	-0.5	0.0	0.0	8.5
ACC 1 Duct - LP Bypass Bell A	94.8	83.0	0.0	0.0	665.1	-67.4	0.6	-21.4	-0.5	0.0	0.0	6.2
ACC 1 Duct - LP Bypass Bell B	94.8	83.0	0.0	0.0	665.0	-67.4	1.2	-16.4	-0.4	0.0	0.0	11.7
ACC 1 Duct - LP Bypass Bell C	94.9	83.0	0.0	0.0	663.3	-67.4	0.8	-18.8	-0.4	0.0	0.9	9.9
ACC 1 Duct - LP Bypass Bell D	94.6	83.0	0.0	0.0	664.4	-67.4	0.8	-14.9	-0.4	0.0	0.4	13.1
ACC 1 Duct - LP Bypass Bell E	94.9	83.0	0.0	0.0	666.9	-67.5	0.8	-17.9	-0.4	0.0	0.2	10.1
ACC 1 Duct - LP Bypass Tube A	83.6	80.0	0.0	0.0	663.8	-67.4	0.8	-14.7	-0.4	0.0	0.0	1.8
ACC 1 Duct - LP Bypass Tube B	83.6	80.0	0.0	0.0	663.4	-67.4	0.8	-14.8	-0.4	0.0	0.3	2.1
ACC 1 Duct - LP Bypass Tube C	83.6	80.0	0.0	0.0	664.1	-67.4	0.8	-17.4	-0.4	0.0	0.0	-0.8
ACC 1 Duct - LP Bypass Tube D	83.6	80.0	0.0	0.0	663.7	-67.4	0.8	-13.5	-0.4	0.0	0.0	3.1
ACC 1 Duct - Main A	107.4	86.0	0.0	0.0	665.1	-67.3	0.5	-10.4	-0.9	0.0	0.3	29.6
ACC 1 Duct - Main B	101.7	86.0	0.0	0.0	649.9	-67.2	0.7	-23.3	-0.6	0.0	0.9	12.2
ACC 1 Duct - Main C	105.1	86.0	0.0	0.0	658.7	-67.4	0.7	-22.2	-0.5	0.0	2.7	18.5

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Clear River Energy Center - Mean Propagation Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 1 Duct - Main D	101.7	86.0	0.0	0.0	645.2	-67.2	0.7	-7.1	-0.8	0.0	1.1	28.5
ACC 1 Duct - Main E	96.0	86.0	0.0	0.0	648.0	-67.2	0.7	-3.3	-1.1	0.0	2.0	30.0
ACC 1 Duct - Main F	98.6	86.0	0.0	0.0	651.2	-67.3	0.7	-4.9	-0.9	0.0	0.0	26.3
ACC 1 Duct - Main G	105.1	86.0	0.0	0.0	660.5	-67.4	0.8	-9.8	-0.5	0.0	0.0	28.2
ACC 1 Duct - Main H	107.4	86.0	0.0	0.0	655.0	-67.3	1.2	-8.8	-0.7	0.0	1.5	33.3
ACC 1 Duct - Main M	96.9	86.0	0.0	0.0	697.2	-67.9	1.0	-17.2	-0.4	0.0	3.5	17.9
ACC 1 Duct - Main N	107.5	86.0	0.0	0.0	682.0	-67.7	0.7	-22.1	-0.6	0.0	2.6	20.4
ACC 1 Duct - Main O	106.8	86.0	0.0	0.0	684.2	-67.7	1.4	-13.9	-0.4	0.0	0.1	26.3
ACC 1 Duct - Main P	106.8	86.0	0.0	0.0	685.0	-67.7	0.9	-18.0	-0.4	0.0	0.4	22.0
ACC 1 Duct - Main Q	106.9	86.0	0.0	0.0	683.4	-67.7	0.9	-25.1	-0.8	0.0	2.1	16.3
ACC 1 Duct - Main R	99.4	86.0	0.0	0.0	670.2	-67.5	0.8	-14.5	-0.4	0.0	0.2	18.0
ACC 1 Duct - Main S	99.2	86.0	0.0	0.0	668.4	-67.5	0.8	-18.0	-0.4	0.0	1.1	15.3
ACC 1 Duct - Riser 1 A	94.0	76.0	0.0	0.0	668.7	-67.5	-0.1	-7.3	-0.6	0.0	0.5	19.1
ACC 1 Duct - Riser 1 B	94.1	76.0	0.0	0.0	670.7	-67.5	-0.1	-10.2	-0.5	0.0	0.1	15.8
ACC 1 Duct - Riser 1 C	94.0	76.0	0.0	0.0	671.7	-67.5	-0.1	-15.4	-0.4	0.0	0.0	10.5
ACC 1 Duct - Riser 1 D	94.1	76.0	0.0	0.0	669.6	-67.5	-0.1	-8.7	-0.5	0.0	0.5	17.7
ACC 1 Duct - Riser 2 A	94.0	76.0	0.0	0.0	681.2	-67.7	-0.1	-9.2	-0.5	0.0	0.7	17.2
ACC 1 Duct - Riser 2 B	94.1	76.0	0.0	0.0	683.3	-67.7	-0.1	-13.1	-0.4	0.0	0.2	12.9
ACC 1 Duct - Riser 2 C	94.0	76.0	0.0	0.0	684.2	-67.7	-0.1	-15.8	-0.4	0.0	0.0	10.0
ACC 1 Duct - Riser 2 D	94.1	76.0	0.0	0.0	682.1	-67.7	-0.1	-10.1	-0.5	0.0	0.6	16.3
ACC 1 Duct - Riser 3 A	94.0	76.0	0.0	0.0	694.0	-67.8	-0.1	-9.9	-0.5	0.0	2.8	18.5
ACC 1 Duct - Riser 3 B	94.1	76.0	0.0	0.0	696.1	-67.8	-0.1	-14.7	-0.4	0.0	3.0	14.0
ACC 1 Duct - Riser 3 C	94.0	76.0	0.0	0.0	697.0	-67.9	-0.1	-15.8	-0.4	0.0	7.0	16.9
ACC 1 Duct - Riser 3 D	94.1	76.0	0.0	0.0	695.0	-67.8	-0.1	-10.1	-0.5	0.0	3.6	19.1
ACC 1 Top	109.0	72.7	0.0	0.0	790.0	-68.9	0.4	-6.1	-2.2	0.0	0.1	25.5
ACC 2 Bottom	109.0	72.7	0.0	0.0	707.0	-68.0	0.7	-0.8	-2.9	0.0	0.0	29.5
ACC 2 Duct - Finger 1 A	89.9	66.0	0.0	0.0	774.4	-68.8	-0.4	-4.3	-1.1	0.0	0.0	15.4
ACC 2 Duct - Finger 1 B	88.9	66.0	0.0	0.0	773.2	-68.8	-0.4	-4.1	-1.0	0.0	2.3	17.9
ACC 2 Duct - Finger 1 C	89.9	66.0	0.0	0.0	775.4	-68.8	-0.4	-11.5	-0.7	0.0	0.1	8.6
ACC 2 Duct - Finger 2 A	90.0	66.0	0.0	0.0	786.9	-68.9	-0.4	-4.4	-1.1	0.0	0.0	15.2
ACC 2 Duct - Finger 2 B	89.9	66.0	0.0	0.0	785.7	-68.9	-0.4	-6.2	-0.9	0.0	2.0	15.5
ACC 2 Duct - Finger 2 C	89.9	66.0	0.0	0.0	787.9	-68.9	-0.4	-13.8	-0.6	0.0	0.1	6.2

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Clear River Energy Center - Mean Propagation Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Finger 3 A	90.0	66.0	0.0	0.0	799.4	-69.0	-0.4	-4.7	-1.0	0.0	0.0	14.8
ACC 2 Duct - Finger 3 B	89.9	66.0	0.0	0.0	798.3	-69.0	-0.4	-6.6	-0.9	0.0	2.1	15.0
ACC 2 Duct - Finger 3 C	89.9	66.0	0.0	0.0	800.5	-69.1	-0.4	-12.3	-0.7	0.0	0.0	7.4
ACC 2 Duct - HRH Bypass Bell A	99.8	88.0	0.0	0.0	761.7	-68.6	1.1	-23.6	-0.7	0.0	0.0	7.9
ACC 2 Duct - HRH Bypass Bell B	99.8	88.0	0.0	0.0	761.6	-68.6	1.6	-25.7	-0.9	0.0	0.0	6.1
ACC 2 Duct - HRH Bypass Bell C	99.9	88.0	0.0	0.0	759.9	-68.6	1.3	-23.5	-0.7	0.0	2.7	11.1
ACC 2 Duct - HRH Bypass Bell D	99.6	88.0	0.0	0.0	761.1	-68.6	1.3	-17.7	-0.5	0.0	0.5	14.6
ACC 2 Duct - HRH Bypass Bell E	99.9	88.0	0.0	0.0	763.5	-68.6	1.3	-22.6	-0.7	0.0	2.3	11.6
ACC 2 Duct - HRH Bypass Tube A	88.6	85.0	0.0	0.0	760.5	-68.6	1.3	-18.2	-0.5	0.0	0.0	2.6
ACC 2 Duct - HRH Bypass Tube B	88.6	85.0	0.0	0.0	760.2	-68.6	1.3	-18.2	-0.5	0.0	0.6	3.3
ACC 2 Duct - HRH Bypass Tube C	88.6	85.0	0.0	0.0	760.8	-68.6	1.3	-19.6	-0.6	0.0	0.0	1.1
ACC 2 Duct - HRH Bypass Tube D	88.6	85.0	0.0	0.0	760.5	-68.6	1.4	-18.4	-0.5	0.0	0.0	2.5
ACC 2 Duct - LP Bypass Bell A	94.8	83.0	0.0	0.0	766.1	-68.7	1.1	-23.2	-0.7	0.0	0.0	3.4
ACC 2 Duct - LP Bypass Bell B	94.8	83.0	0.0	0.0	766.0	-68.7	1.6	-25.7	-0.9	0.0	0.0	1.1
ACC 2 Duct - LP Bypass Bell C	94.9	83.0	0.0	0.0	764.3	-68.7	1.3	-22.1	-0.6	0.0	1.3	6.1
ACC 2 Duct - LP Bypass Bell D	94.6	83.0	0.0	0.0	765.5	-68.7	1.3	-17.9	-0.5	0.0	0.5	9.4
ACC 2 Duct - LP Bypass Bell E	94.9	83.0	0.0	0.0	767.9	-68.7	1.4	-20.9	-0.6	0.0	0.0	6.0
ACC 2 Duct - LP Bypass Tube A	83.6	80.0	0.0	0.0	765.0	-68.7	1.3	-18.5	-0.5	0.0	0.0	-2.7
ACC 2 Duct - LP Bypass Tube B	83.6	80.0	0.0	0.0	764.6	-68.7	1.3	-18.5	-0.5	0.0	0.7	-2.0
ACC 2 Duct - LP Bypass Tube C	83.6	80.0	0.0	0.0	765.3	-68.7	1.3	-19.6	-0.6	0.0	0.0	-3.8
ACC 2 Duct - LP Bypass Tube D	83.6	80.0	0.0	0.0	764.9	-68.7	1.4	-18.6	-0.5	0.0	0.0	-2.8
ACC 2 Duct - Main A	103.2	86.0	0.0	0.0	748.9	-68.5	0.9	-15.6	-0.5	0.0	0.3	19.8
ACC 2 Duct - Main B	101.6	86.0	0.0	0.0	750.4	-68.5	1.3	-24.4	-0.8	0.0	0.0	9.2
ACC 2 Duct - Main C	101.8	86.0	0.0	0.0	745.8	-68.4	1.3	-13.4	-0.5	0.0	0.5	21.2
ACC 2 Duct - Main D	98.6	86.0	0.0	0.0	748.3	-68.5	1.3	-11.2	-0.5	0.0	0.7	20.4
ACC 2 Duct - Main E	98.2	86.0	0.0	0.0	751.2	-68.5	1.3	-14.3	-0.5	0.0	1.2	17.4
ACC 2 Duct - Main F	103.2	86.0	0.0	0.0	748.8	-68.5	1.6	-24.6	-0.8	0.0	0.4	11.4
ACC 2 Duct - Main G	98.9	86.0	0.0	0.0	782.8	-68.9	1.3	-19.2	-0.5	0.0	0.0	11.6
ACC 2 Duct - Main H	107.5	86.0	0.0	0.0	767.3	-68.7	1.0	-21.7	-0.6	0.0	0.6	18.1
ACC 2 Duct - Main I	106.8	86.0	0.0	0.0	770.3	-68.7	1.3	-18.6	-0.5	0.0	0.3	20.6
ACC 2 Duct - Main J	106.8	86.0	0.0	0.0	769.6	-68.7	1.6	-24.9	-0.8	0.0	0.9	14.9
ACC 2 Duct - Main K	99.4	86.0	0.0	0.0	755.2	-68.6	1.3	-16.5	-0.5	0.0	0.2	15.3



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
ACC 2 Duct - Main R	99.2	86.0	0.0	0.0	753.7	-68.5	1.3	-23.9	-0.7	0.0	2.0	9.4
ACC 2 Duct - Main S	106.9	86.0	0.0	0.0	768.9	-68.7	1.3	-24.0	-0.8	0.0	0.3	15.0
ACC 2 Duct - Riser 1 A	94.0	76.0	0.0	0.0	753.3	-68.5	0.1	-7.0	-0.7	0.0	1.4	19.3
ACC 2 Duct - Riser 1 B	94.1	76.0	0.0	0.0	755.4	-68.6	0.1	-14.0	-0.5	0.0	0.2	11.3
ACC 2 Duct - Riser 1 C	94.0	76.0	0.0	0.0	756.4	-68.6	0.1	-16.0	-0.5	0.0	0.0	9.0
ACC 2 Duct - Riser 1 D	94.1	76.0	0.0	0.0	754.3	-68.5	0.1	-7.1	-0.7	0.0	1.4	19.3
ACC 2 Duct - Riser 2 A	94.0	76.0	0.0	0.0	766.2	-68.7	0.1	-10.8	-0.6	0.0	0.8	14.9
ACC 2 Duct - Riser 2 B	94.1	76.0	0.0	0.0	768.2	-68.7	0.1	-15.4	-0.5	0.0	0.2	9.8
ACC 2 Duct - Riser 2 C	94.0	76.0	0.0	0.0	769.2	-68.7	0.1	-17.6	-0.5	0.0	0.0	7.3
ACC 2 Duct - Riser 2 D	94.1	76.0	0.0	0.0	767.2	-68.7	0.1	-11.4	-0.6	0.0	0.7	14.2
ACC 2 Duct - Riser 3 A	94.0	76.0	0.0	0.0	779.1	-68.8	0.1	-11.2	-0.6	0.0	0.9	14.5
ACC 2 Duct - Riser 3 B	94.1	76.0	0.0	0.0	781.1	-68.8	0.1	-16.1	-0.5	0.0	0.3	9.0
ACC 2 Duct - Riser 3 C	94.0	76.0	0.0	0.0	782.1	-68.9	0.1	-17.6	-0.6	0.0	0.0	7.2
ACC 2 Duct - Riser 3 D	94.1	76.0	0.0	0.0	780.1	-68.8	0.1	-13.3	-0.6	0.0	1.0	12.5
ACC 2 Top	109.0	72.7	0.0	0.0	707.5	-68.0	0.3	-5.2	-2.1	-7.2	0.4	27.3
ACHE 1	99.0	72.9	0.0	0.0	751.3	-68.5	2.2	-7.4	-2.2	0.0	0.0	23.1
ACHE 2	99.0	72.9	0.0	0.0	645.5	-67.2	1.8	-5.9	-2.2	0.0	0.8	26.2
Air Process Skid 2	93.0	93.0	0.0	0.0	680.2	-67.4	3.0	-28.3	-3.0	0.0	0.0	-0.7
Air Process Skid 2	93.0	93.0	0.0	0.0	763.5	-68.6	3.2	-28.0	-4.1	0.0	0.0	-4.5
Ammonia Forwarding Pump	93.1	93.1	0.0	0.0	762.2	-68.6	3.1	-7.9	-4.2	0.0	0.1	15.6
Ammonia Injection Skid 1	98.1	98.1	0.0	0.0	714.2	-68.1	3.0	-26.9	-3.0	0.0	2.4	5.6
Ammonia Injection Skid 2	98.1	98.1	0.0	0.0	609.9	-66.7	2.5	-5.2	-5.2	0.0	3.4	26.8
Aux Boiler Building - East Side	88.0	64.3	0.0	3.0	675.2	-67.6	1.2	-4.6	-0.5	0.0	0.0	19.5
Aux Boiler Building - North Side	88.5	64.3	0.0	3.0	686.4	-67.7	1.3	-3.9	-0.5	0.0	0.0	20.6
Aux Boiler Building - Roof	91.9	64.3	0.0	0.0	688.2	-67.7	0.6	-5.5	-0.5	0.0	0.6	19.3
Aux Boiler Building - South Side	88.5	64.3	0.0	3.0	690.1	-67.8	1.2	-10.2	-0.3	0.0	0.3	14.9
Aux Boiler Building - West Side	88.0	64.3	0.0	3.0	701.0	-67.9	1.3	-15.5	-0.3	0.0	3.3	11.9
Aux Boiler Building Vent Louvers - North	86.0	75.2	0.0	3.0	681.9	-67.7	1.9	-2.6	-2.4	0.0	0.0	18.3
Aux Boiler Building Vent Louvers - South	86.0	75.2	0.0	3.0	694.4	-67.8	2.0	-16.0	-0.9	0.0	0.3	6.7
Aux Boiler FD Fan Inlet	100.0	100.0	0.0	0.0	674.3	-67.6	1.5	-5.1	-2.2	0.0	2.5	29.0
Aux Boiler Stack Exhaust	100.0	100.0	0.0	0.0	695.0	-67.8	0.7	0.0	-4.3	-8.0	0.0	20.6
Aux Transformer 1 - Side 1	82.0	69.2	0.0	3.0	717.7	-68.1	2.2	-26.8	-1.8	0.0	3.5	-5.9

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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Aux Transformer 1 - Side 2	82.0	70.2	0.0	3.0	713.8	-68.1	2.2	-25.6	-1.4	0.0	1.9	-6.0
Aux Transformer 1 - Side 3	82.0	69.2	0.0	3.0	716.0	-68.1	2.2	-25.1	-1.3	0.0	3.2	-4.1
Aux Transformer 1 - Side 4	82.0	70.2	0.0	3.0	719.9	-68.1	2.2	-26.7	-1.7	0.0	4.6	-4.8
Aux Transformer 1 - Top	82.0	66.9	0.0	0.0	716.9	-68.1	2.0	-24.8	-1.3	0.0	3.5	-6.7
Aux Transformer 2 - Side 1	82.0	69.2	0.0	3.0	617.7	-66.8	1.7	-15.8	-1.0	0.0	8.6	11.7
Aux Transformer 2 - Side 2	82.0	70.2	0.0	3.0	613.7	-66.8	1.7	-9.1	-1.3	0.0	1.0	10.5
Aux Transformer 2 - Side 3	82.0	69.2	0.0	3.0	615.7	-66.8	1.7	-8.4	-1.4	0.0	3.5	13.6
Aux Transformer 2 - Side 4	82.0	70.2	0.0	3.0	619.7	-66.8	1.8	-17.2	-1.0	0.0	9.3	11.0
Aux Transformer 2 - Top	82.0	66.9	0.0	0.0	616.7	-66.8	1.3	-6.0	-1.7	0.0	2.9	11.7
BFW Pump Enclosure 1-Side 1	94.4	76.9	0.0	3.0	758.0	-68.6	1.7	-25.4	-0.7	0.0	0.0	4.4
BFW Pump Enclosure 1-Side 2	97.2	76.9	0.0	3.0	747.2	-68.5	1.7	-25.2	-0.7	0.0	0.3	7.8
BFW Pump Enclosure 1-Side 3	94.4	76.9	0.0	3.0	751.6	-68.5	1.7	-23.3	-0.5	0.0	0.0	6.7
BFW Pump Enclosure 1-Side 4	97.2	76.9	0.0	3.0	762.3	-68.6	1.7	-25.4	-0.7	0.0	0.0	7.2
BFW Pump Enclosure 1-Top	103.5	76.9	0.0	0.0	754.8	-68.5	1.5	-24.1	-0.6	0.0	0.1	11.7
BFW Pump Enclosure 2-Side 1	94.4	76.9	0.0	3.0	654.3	-67.3	1.5	-22.7	-0.5	0.0	0.0	8.4
BFW Pump Enclosure 2-Side 2	97.2	76.9	0.0	3.0	643.1	-67.2	1.5	-22.3	-0.4	0.0	0.8	12.7
BFW Pump Enclosure 2-Side 3	94.4	76.9	0.0	3.0	646.8	-67.2	1.5	-23.5	-0.5	0.0	0.0	16.9
BFW Pump Enclosure 2-Side 4	97.2	76.9	0.0	3.0	657.8	-67.4	1.8	-23.5	-0.6	0.0	0.0	8.5
BFW Pump Enclosure 2-Top	103.4	76.9	0.0	0.0	650.5	-67.3	1.1	-20.3	-0.4	0.0	0.8	17.4
Condensate Equipment Bldg 1 - East Side	77.7	56.7	0.0	3.0	745.5	-68.4	1.9	-7.0	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 1 - North Side	75.2	56.7	0.0	3.0	747.4	-68.5	1.9	-18.8	-0.3	0.0	0.7	-8.8
Condensate Equipment Bldg 1 - Roof	78.0	51.7	0.0	0.0	752.7	-68.5	1.6	-7.8	-0.6	0.0	0.1	2.8
Condensate Equipment Bldg 1 - South Side	75.2	56.7	0.0	3.0	758.0	-68.6	1.9	-15.2	-0.4	0.0	0.5	-3.6
Condensate Equipment Bldg 1 - West Side	77.7	56.7	0.0	3.0	759.8	-68.6	1.9	-18.3	-0.4	0.0	1.1	-3.5
Condensate Equipment Bldg 2 - East Side	77.7	56.7	0.0	3.0	662.8	-67.4	1.6	-6.0	-0.6	0.0	0.0	8.3
Condensate Equipment Bldg 2 - North Side	75.2	56.7	0.0	3.0	664.0	-67.4	1.6	-6.1	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 2 - Roof	78.0	51.7	0.0	0.0	669.8	-67.5	1.0	-5.6	-0.5	0.0	0.0	5.4
Condensate Equipment Bldg 2 - South Side	75.2	56.7	0.0	3.0	675.9	-67.6	1.7	-10.2	-0.3	0.0	0.0	1.7
Condensate Equipment Bldg 2 - West Side	77.7	56.7	0.0	3.0	676.8	-67.6	1.7	-13.0	-0.3	0.0	0.0	1.5
CTG 1 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	739.2	-68.4	3.2	-6.7	-5.7	0.0	0.0	26.2
CTG 2 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	637.2	-67.1	2.9	-7.5	-4.5	0.0	0.0	27.6
CTG Air Inlet 1	106.2	82.9	0.0	0.0	769.2	-68.7	3.2	-26.9	-8.4	0.0	0.1	5.5



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Clear River Energy Center - Mean Propagation Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
CTG Air Inlet 2	106.2	82.9	0.0	0.0	666.4	-67.5	2.8	-26.1	-7.1	0.0	0.2	8.4
CTG Air Inlet Duct 1 - North	99.9	84.4	0.0	0.0	750.4	-68.5	2.7	-25.3	-2.8	0.0	1.3	7.3
CTG Air Inlet Duct 1 - South	99.9	84.4	0.0	0.0	752.0	-68.5	2.7	-26.1	-3.3	0.0	1.0	5.7
CTG Air Inlet Duct 1 - Top	99.9	83.3	0.0	0.0	751.3	-68.5	2.4	-26.6	-3.7	0.0	0.1	3.6
CTG Air Inlet Duct 2 - North	99.9	84.3	0.0	0.0	647.7	-67.2	2.2	-23.3	-2.2	0.0	1.0	10.3
CTG Air Inlet Duct 2 - South	99.9	84.3	0.0	0.0	649.7	-67.2	2.2	-25.2	-2.6	0.0	0.0	7.1
CTG Air Inlet Duct 2 - Top	99.9	83.2	0.0	0.0	649.4	-67.2	2.0	-26.7	-3.6	0.0	0.9	5.3
CTG Building 1 - East Facade	95.1	64.7	0.0	3.0	718.8	-68.1	0.8	-5.0	-0.3	0.0	0.0	25.4
CTG Building 1 - North Facade	94.0	64.7	0.0	3.0	727.6	-68.2	0.8	-6.7	-0.3	0.0	0.0	22.6
CTG Building 1 - Roof	88.9	59.7	0.0	0.0	733.1	-68.3	-0.1	-4.7	-0.4	0.0	0.2	16.6
CTG Building 1 - West Facade	95.1	64.7	0.0	3.0	746.3	-68.5	0.8	-17.6	-0.3	0.0	0.0	12.6
CTG Building 1 Vent Louvers - East	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-6.6	-2.6	0.0	0.0	17.0
CTG Building 1 Vent Louvers - North	89.6	77.0	0.0	3.0	719.5	-68.1	1.8	-14.1	-1.1	0.0	0.2	11.2
CTG Building 1 Vent Louvers - West	70.1	57.6	0.0	3.0	742.9	-68.4	1.3	-17.2	-0.2	0.0	0.0	-11.4
CTG Building 2 - East Facade	95.1	64.7	0.0	3.0	616.4	-66.8	0.5	-1.3	-0.3	0.0	0.0	30.2
CTG Building 2 - North Facade	94.0	64.7	0.0	3.0	624.3	-66.9	0.6	-1.9	-0.3	0.0	0.0	28.5
CTG Building 2 - Roof	89.9	59.7	0.0	0.0	630.5	-67.0	0.0	-4.6	-0.3	0.0	0.0	17.9
CTG Building 2 - West Facade	95.1	64.7	0.0	3.0	643.6	-67.2	0.5	-14.5	-0.2	0.0	0.0	16.7
CTG Building 2 Vent Louvers - East	89.6	77.0	0.0	3.0	617.4	-66.8	1.5	-0.1	-5.4	0.0	0.0	21.8
CTG Building 2 Vent Louvers - North	89.6	77.0	0.0	3.0	616.4	-66.8	1.5	-0.1	-5.4	0.0	1.4	23.2
CTG Building 2 Vent Louvers - West	89.6	77.0	0.0	3.0	639.7	-67.1	1.5	-20.4	-1.6	0.0	0.0	4.9
Demin Water Pump	93.1	93.1	0.0	0.0	675.5	-67.6	3.1	-24.9	-2.0	0.0	0.5	2.2
Duct Burner Skid 1	95.0	95.0	0.0	0.0	717.4	-68.1	3.0	-25.2	-2.1	0.0	2.8	5.4
Duct Burner Skid 2	95.0	95.0	0.0	0.0	613.7	-66.8	2.5	-3.6	-3.8	0.0	1.8	25.2
Emergency Diesel Generator - Side 1	8.2	-7.7	0.0	3.0	683.7	-67.7	3.3	-28.3	-3.9	0.0	2.1	-83.3
Emergency Diesel Generator - Side 2	8.2	-7.8	0.0	3.0	680.2	-67.6	3.3	-28.2	-3.8	0.0	1.2	-83.9
Emergency Diesel Generator - Top	8.2	-8.6	0.0	0.0	682.0	-67.7	3.1	-27.5	-3.7	0.0	2.8	-84.8
Excitation Transformer 1	80.0	80.0	0.0	0.0	718.7	-68.1	2.2	-24.5	-1.3	0.0	2.8	-8.9
Excitation Transformer 2	80.0	80.0	0.0	0.0	617.1	-66.8	1.6	-5.3	-2.2	0.0	2.4	9.6
Fire Pump Building - Roof	-4.1	-23.3	0.0	0.0	630.7	-67.0	1.2	-5.5	-0.5	0.0	0.0	-76.0
Fire Pump Building - Side 1	-5.7	-23.3	0.0	3.0	633.9	-67.0	1.8	-11.8	-0.3	0.0	0.0	-80.1
Fire Pump Building - Side 2	-8.5	-23.3	0.0	3.0	631.3	-67.0	1.8	-6.6	-0.4	0.0	0.0	-77.7



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Fire Pump Building - Side 3	-5.7	-23.3	0.0	3.0	627.3	-66.9	1.7	-6.4	-0.5	0.0	0.0	-74.9
Fire Pump Building - Side 4	-6.5	-23.3	0.0	3.0	630.0	-67.0	1.8	-6.4	-0.5	0.0	0.0	-77.7
Fuel Gas Dewpoint Heater	102.2	85.3	0.0	0.0	795.5	-69.0	3.9	-26.8	-15.5	0.0	0.0	-7.2
Fuel Gas Metering and Regulating Station	93.0	93.0	0.0	0.0	798.2	-69.0	3.9	-28.7	-8.8	0.0	0.0	-9.7
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	748.2	-68.5	3.2	-28.0	-4.1	0.0	0.0	-4.4
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	645.0	-67.2	3.0	-26.6	-3.1	0.0	0.0	-1.0
Gas Aftercooler 1	101.0	84.0	0.0	0.0	806.0	-69.1	3.2	-27.6	-3.9	0.0	0.0	3.6
Gas Aftercooler 2	101.0	83.9	0.0	0.0	809.0	-69.2	3.2	-27.7	-4.0	0.0	0.0	3.4
Gas Compressor Bldg Louvers - E	105.7	98.0	0.0	3.0	784.3	-68.9	2.9	-27.1	-3.1	0.0	0.0	12.6
Gas Compressor Bldg Louvers - N	105.7	98.0	0.0	3.0	790.8	-69.0	2.9	-27.3	-3.3	0.0	0.0	12.0
Gas Compressor Bldg Louvers - S	105.7	98.0	0.0	3.0	791.0	-69.0	2.9	-27.6	-3.6	0.0	0.0	11.6
Gas Compressor Bldg Louvers - W	105.7	98.0	0.0	3.0	797.4	-69.0	2.9	-27.6	-3.6	0.0	0.0	11.5
Gas Compressor Building - East Side	99.1	76.7	0.0	3.0	784.1	-68.9	1.7	-16.1	-0.3	0.0	0.0	18.5
Gas Compressor Building - North Side	97.5	76.7	0.0	3.0	788.6	-68.9	1.7	-16.6	-0.3	0.0	0.0	16.4
Gas Compressor Building - South Side	101.0	76.7	0.0	3.0	791.0	-69.0	1.2	-17.7	-0.4	0.0	0.0	15.1
Gas Compressor Building - Roof	97.5	76.7	0.0	3.0	793.2	-69.0	1.7	-19.5	-0.3	0.0	0.0	13.4
Gas Compressor Building - South Side	99.1	76.7	0.0	3.0	797.6	-69.0	1.7	-21.3	-0.4	0.0	0.0	13.1
Gas Compressor Building - West Side	94.0	75.7	0.0	3.0	723.0	-68.2	2.1	-26.4	-1.7	0.0	1.4	4.2
GSU 1 - Side 1	94.0	78.0	0.0	3.0	714.6	-68.1	2.1	-25.1	-1.5	0.0	0.2	4.7
GSU 1 - Side 2	94.0	75.7	0.0	3.0	720.1	-68.1	2.1	-26.3	-1.6	0.0	1.5	4.6
GSU 1 - Side 3	94.0	78.0	0.0	3.0	728.5	-68.2	2.1	-26.5	-1.8	0.0	2.5	5.2
GSU 1 - Side 4	94.0	72.9	0.0	3.0	721.4	-68.2	1.8	-23.9	-1.3	0.0	1.7	4.2
GSU 1 - Top	94.0	75.7	0.0	3.0	623.4	-66.9	1.6	-13.1	-1.2	0.0	0.3	17.7
GSU 2 - Side 1	94.0	78.0	0.0	3.0	615.0	-66.8	1.2	-1.9	-2.6	0.0	0.0	27.0
GSU 2 - Side 2	94.0	75.7	0.0	3.0	620.1	-66.8	1.6	-6.8	-2.1	0.0	0.5	23.3
GSU 2 - Side 3	94.0	78.0	0.0	3.0	628.6	-67.0	1.7	-18.3	-1.0	0.0	2.0	14.4
GSU 2 - Side 4	94.0	72.9	0.0	3.0	621.5	-66.9	1.1	-6.3	-1.7	0.0	1.7	22.0
GSU 2 - Top	97.0	66.6	0.0	3.0	730.9	-68.3	0.7	-16.6	-0.4	0.0	0.0	15.5
HRSG 1 - Body - Side 1	97.0	66.6	0.0	3.0	720.4	-68.1	0.7	-4.2	-0.7	0.0	0.0	27.8
HRSG 1 - Body - Side 2	102.4	102.4	0.0	0.0	724.6	-68.2	2.0	0.0	-0.4	0.0	0.0	32.3
HRSG 1 - Exhaust Stack	98.5	80.0	0.0	0.0	744.6	-68.4	0.5	-17.1	-0.5	0.0	0.2	13.1
HRSG 1 - Piping and Valves	65.6	44.8	0.0	3.0	721.3	-68.2	2.0	-0.8	-0.1	0.0	0.0	1.5
HRSG 1 - Stack Walls - Side 1												



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Source	PWL dB(A)	PWL/Unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HRSG 1 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	719.5	-68.1	2.0	-1.5	-0.2	0.0	0.0	0.8
HRSG 1 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	719.1	-68.1	2.0	-3.4	-0.2	0.0	0.0	-1.2
HRSG 1 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	720.4	-68.1	2.0	-3.7	-0.2	0.0	0.0	-1.5
HRSG 1 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	722.6	-68.2	2.0	-4.4	-0.2	0.0	0.0	-2.2
HRSG 1 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	724.4	-68.2	2.0	-6.2	-0.1	0.0	0.0	-3.9
HRSG 1 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	724.7	-68.2	2.0	-6.9	-0.1	0.0	0.0	-4.7
HRSG 1 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	723.5	-68.2	2.0	-8.5	-0.2	0.0	0.0	-6.3
HRSG 1 - T1 - Side 1	96.6	81.2	0.0	3.0	734.5	-68.3	1.7	-19.1	-0.4	0.0	0.5	15.1
HRSG 1 - T1 - Side 2	96.6	81.2	0.0	3.0	727.2	-68.2	1.6	-11.1	-0.4	0.0	1.0	22.6
HRSG 1 - T1 - Top	96.6	82.8	0.0	0.0	731.2	-68.3	1.0	-13.0	-0.4	0.0	2.1	18.0
HRSG 1 - T2 - Side 1	96.6	76.2	0.0	3.0	734.5	-68.3	1.0	-17.5	-0.4	0.0	0.1	14.5
HRSG 1 - T2 - Side 2	96.6	76.2	0.0	3.0	725.7	-68.2	1.0	-8.3	-0.4	0.0	0.0	23.8
HRSG 1 - T2 - Top	96.6	80.4	0.0	0.0	730.5	-68.3	-0.1	-7.5	-0.5	0.0	0.3	20.6
HRSG 2 - Body - Side 1	97.0	86.6	0.0	3.0	626.6	-66.9	0.4	-15.8	-0.3	0.0	0.0	17.5
HRSG 2 - Body - Side 2	97.0	86.6	0.0	3.0	616.2	-66.8	0.5	-1.3	-0.7	0.0	0.0	31.8
HRSG 2 - Exhaust Stack	102.4	102.4	0.0	0.0	620.3	-66.8	1.7	0.0	-0.3	-3.6	0.0	33.4
HRSG 2 - Piping and Valves	98.5	80.1	0.0	0.0	640.8	-67.1	0.2	-13.2	-0.5	0.0	2.7	20.6
HRSG 2 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	616.7	-66.8	1.9	-0.8	-0.1	0.0	0.0	2.7
HRSG 2 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	614.9	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.3
HRSG 2 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	614.4	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	615.5	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	617.8	-66.8	1.9	-4.4	-0.1	0.0	0.0	-0.9
HRSG 2 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	619.6	-66.8	1.9	-6.1	-0.1	0.0	0.0	-2.6
HRSG 2 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	620.0	-66.8	1.9	-7.0	-0.1	0.0	0.0	-3.5
HRSG 2 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	618.9	-66.8	1.9	-7.8	-0.1	0.0	0.0	-4.3
HRSG 2 - T1 - Side 1	96.6	81.2	0.0	3.0	631.2	-67.0	1.0	-10.7	-0.2	0.0	0.0	23.2
HRSG 2 - T1 - Side 2	96.6	81.2	0.0	3.0	624.0	-66.9	1.2	-3.9	-0.9	0.0	2.0	31.2
HRSG 2 - T1 - Top	96.6	82.8	0.0	0.0	627.9	-66.9	0.7	-5.4	-0.4	0.0	2.4	27.0
HRSG 2 - T2 - Side 1	96.6	76.2	0.0	3.0	631.1	-67.0	0.6	-12.3	-0.3	0.0	0.1	20.8
HRSG 2 - T2 - Side 2	96.6	76.2	0.0	3.0	622.3	-66.9	0.7	-1.8	-0.7	0.0	0.7	31.6
HRSG 2 - T2 - Top	96.6	80.4	0.0	0.0	627.4	-66.9	0.0	-6.0	-0.6	0.0	0.7	23.7
HRSG Recirc Pump 1	93.0	93.0	0.0	0.0	711.2	-68.0	3.1	-26.3	-2.6	0.0	8.1	7.3



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HRSR Rectirc Pump 2	93.0	93.0	0.0	0.0	606.4	-66.6	2.8	-7.3	-3.6	0.0	2.2	20.6
Isolation Transformer 1	80.0	80.0	0.0	0.0	703.7	-67.9	2.1	-25.4	-1.3	0.0	8.5	-3.9
Isolation Transformer 2	80.0	80.0	0.0	0.0	601.3	-66.6	1.2	-2.9	-2.8	0.0	2.4	11.4
Rooftop Vent Fan - Admin 1	87.8	87.8	0.0	0.0	569.5	-66.1	2.7	-4.4	-4.9	0.0	0.0	15.2
Rooftop Vent Fan - Admin 2	87.8	87.8	0.0	0.0	612.2	-66.7	2.8	-7.5	-2.7	0.0	0.0	13.7
Rooftop Vent Fan - Admin 3	87.8	87.8	0.0	0.0	589.4	-66.4	2.8	-7.5	-2.7	0.0	0.0	13.9
Rooftop Vent Fan - Admin 4	87.8	87.8	0.0	0.0	614.6	-66.8	2.8	-7.6	-2.8	0.0	1.4	14.9
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	670.7	-67.5	2.8	-2.0	-5.1	0.0	0.0	16.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	753.2	-68.5	3.0	-6.0	-2.7	0.0	0.0	13.6
Rooftop Vent Fan - CTG Bldg 1	87.8	87.8	0.0	0.0	735.3	-68.3	3.0	-6.8	-2.7	0.0	0.0	12.9
Rooftop Vent Fan - CTG Bldg 2	87.8	87.8	0.0	0.0	724.3	-68.2	2.9	-6.5	-2.7	0.0	0.0	13.3
Rooftop Vent Fan - CTG Bldg 3	87.8	87.8	0.0	0.0	728.3	-68.2	2.9	-3.1	-3.4	0.0	0.0	16.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.8	0.0	0.0	632.6	-67.0	2.7	-7.4	-2.9	0.0	0.0	13.2
Rooftop Vent Fan - CTG Bldg 5	87.8	87.8	0.0	0.0	627.4	-66.9	2.7	-0.7	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - CTG Bldg 6	87.8	87.8	0.0	0.0	622.8	-66.9	2.7	-0.8	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.8	0.0	0.0	790.3	-68.9	3.1	-17.9	-1.3	0.0	0.0	2.7
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.8	0.0	0.0	791.8	-69.0	3.1	-18.6	-1.5	0.0	0.0	1.9
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.8	0.0	0.0	793.1	-69.0	3.1	-18.3	-1.5	0.0	0.0	2.2
Rooftop Vent Fan - STG Bldg 1	87.8	87.8	0.0	0.0	658.3	-67.4	2.8	-7.5	-2.9	0.0	0.0	12.8
Rooftop Vent Fan - STG Bldg 2	87.8	87.8	0.0	0.0	634.0	-67.0	2.7	-0.7	-4.1	0.0	0.0	18.7
Rooftop Vent Fan - STG Bldg 3	87.8	87.8	0.0	0.0	645.9	-67.2	2.7	-7.5	-2.9	0.0	0.0	12.9
Rooftop Vent Fan - STG Bldg 4	87.8	87.8	0.0	0.0	735.2	-68.3	2.9	-7.2	-2.9	0.0	0.0	12.3
Rooftop Vent Fan - STG Bldg 5	87.8	87.8	0.0	0.0	758.9	-68.6	3.0	-7.8	-3.1	0.0	0.0	11.3
Rooftop Vent Fan - STG Bldg 6	87.8	87.8	0.0	0.0	746.0	-68.4	3.0	-7.1	-2.8	0.0	0.0	12.3
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.8	0.0	0.0	700.5	-67.9	3.0	-7.7	-3.0	0.0	0.0	12.1
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.8	0.0	0.0	680.5	-67.6	3.0	-7.1	-2.7	0.0	0.0	13.3
Safety Vent	129.0	129.0	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-8.2	0.7	48.1
Scammer Cooling Air Blower 1	93.1	93.1	0.0	0.0	728.1	-68.2	3.2	-5.0	-3.8	0.0	0.0	19.2
Scammer Cooling Air Blower 2	93.1	93.1	0.0	0.0	624.3	-66.9	2.9	-0.1	-4.5	0.0	0.0	24.5
Service Water Pump	93.1	93.1	0.0	0.0	662.7	-67.4	3.0	-26.9	-2.9	0.0	0.3	-0.7
Startup Vent - Aux Boiler Blowdown	114.2	114.2	0.0	0.0	680.1	-67.6	1.3	0.0	-8.4	-8.0	0.0	31.5
Startup Vent - Aux Boiler Startup	114.2	114.2	0.0	0.0	683.5	-67.7	1.3	0.0	-8.4	-8.0	0.0	31.4



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Clear River Energy Center - Mean Propagation Emergency Shutdown Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Startup Vent - HRSG Blowdown 1	114.2	114.2	0.0	0.0	608.5	-66.7	1.2	0.0	-7.9	-6.2	0.7	33.2
Startup Vent - HRSG Blowdown 2	114.2	114.2	0.0	0.0	713.7	-68.1	1.3	0.0	-8.5	-7.8	0.6	31.7
Startup Vent - Steam Turbine Drains Tank	114.2	114.2	0.0	0.0	653.9	-67.3	2.6	-0.1	-8.6	-8.6	0.0	32.2
Steam Turbine Bldg 1 - East Facade	92.4	64.9	0.0	3.0	726.9	-68.2	1.2	-7.6	-0.3	0.0	0.0	20.5
Steam Turbine Bldg 1 - North Facade	90.7	64.9	0.0	3.0	757.1	-68.6	1.2	-14.8	-0.3	0.0	0.0	11.2
Steam Turbine Bldg 1 - Roof	88.8	59.9	0.0	0.0	746.8	-68.5	0.2	-6.2	-0.5	0.0	0.2	14.1
Steam Turbine Bldg 1 - South Facade	95.7	64.9	0.0	3.0	748.9	-68.5	1.2	-15.0	-0.2	0.0	0.0	16.3
Steam Turbine Bldg 1 - West Facade	92.4	64.9	0.0	3.0	765.7	-68.7	1.2	-18.3	-0.3	0.0	0.0	9.4
Steam Turbine Bldg 2 - East Facade	92.4	64.9	0.0	3.0	626.1	-66.9	0.9	-1.0	-0.4	0.0	0.0	28.0
Steam Turbine Bldg 2 - North Facade	90.7	64.9	0.0	3.0	655.2	-67.3	1.0	-10.1	-0.2	0.0	0.0	17.0
Steam Turbine Bldg 2 - Roof	88.8	59.9	0.0	0.0	645.7	-67.2	0.2	-4.9	-0.5	0.0	0.0	16.4
Steam Turbine Bldg 2 - South Facade 1	95.7	64.9	0.0	3.0	647.9	-67.2	0.9	-6.2	-0.2	0.0	0.1	23.0
Steam Turbine Bldg 2 - South Facade 2	92.4	64.9	0.0	3.0	664.1	-67.4	1.0	-16.7	-0.2	0.0	0.0	12.0
STG Building 1 Vent Louvers - East	89.3	76.8	0.0	3.0	726.6	-68.2	1.4	-14.1	-1.0	0.0	0.0	10.4
STG Building 1 Vent Louvers - South 1	89.3	76.8	0.0	3.0	758.9	-68.6	1.5	-21.6	-1.4	0.0	0.0	2.2
STG Building 1 Vent Louvers - South 2	89.3	76.8	0.0	3.0	737.1	-68.3	1.4	-20.4	-1.3	0.0	0.0	3.7
STG Building 1 Vent Louvers - West	89.3	76.8	0.0	3.0	785.8	-68.7	1.5	-24.0	-1.8	0.0	0.7	0.0
STG Building 2 Vent Louvers - East	89.3	76.8	0.0	3.0	625.6	-66.9	1.0	0.0	-3.0	0.0	0.0	23.5
STG Building 2 Vent Louvers - South 1	89.3	76.8	0.0	3.0	657.9	-67.4	1.1	-17.2	-1.1	0.0	0.0	7.8
STG Building 2 Vent Louvers - South 2	89.3	76.8	0.0	3.0	636.5	-67.1	1.1	-13.2	-1.2	0.0	0.0	12.0
STG Building 2 Vent Louvers - West	89.3	76.8	0.0	3.0	664.2	-67.4	1.2	-23.4	-1.5	0.0	0.0	1.1
STW Heat Exchanger 1	102.0	90.9	0.0	0.0	747.9	-68.5	3.1	-28.0	-4.2	0.0	0.0	4.5
STW Heat Exchanger 2	102.0	90.9	0.0	0.0	645.2	-67.2	2.8	-26.0	-3.1	0.0	0.0	8.5
Waste Water Pump	93.1	93.1	0.0	0.0	689.7	-67.5	3.1	-25.8	-2.3	0.0	0.0	0.5
Water Treatment Building - East Side	73.9	56.7	0.0	3.0	660.8	-67.4	1.5	-6.1	-0.5	0.0	0.0	9.5
Water Treatment Building - North Side	83.3	56.7	0.0	3.0	684.3	-67.7	1.5	-4.5	-0.5	0.0	0.0	15.1
Water Treatment Building - Roof	86.4	56.7	0.0	0.0	685.7	-67.7	0.9	-5.6	-0.6	0.0	0.0	13.5
Water Treatment Building - South Side	83.3	56.7	0.0	3.0	684.8	-67.7	1.5	-14.9	-0.3	0.0	0.0	4.8
Water Treatment Building - West Side	76.9	56.7	0.0	3.0	711.6	-68.0	1.6	-15.1	-0.3	0.0	0.0	0.0
WTB Ventilation Louvers - North Side	90.0	78.0	0.0	3.0	678.3	-67.6	2.6	-6.2	-3.1	0.0	0.0	19.6
WTB Ventilation Louvers - South Side	90.0	78.0	0.0	3.0	693.0	-67.8	2.6	-22.9	-2.1	0.0	0.0	2.9



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Emergency Steam Release

**Clear River Energy Center - Receiver Sound Levels
Emergency Steam Release Analysis - A-Weight - ISO9613**

Name	SPL dB(A)
M1 - Walilum Lake Road	49.2
M2 - Jackson Schoolhouse Road (East)	45.6
M3 - Doe Crossing Drive	43.1
M4 - Buck Hill Road	43.3
M5 - Jackson Schoolhouse Road (South)	38.0



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**Clear River Energy Center - Receiver Spectra
Emergency Steam Release Analysis - A-Weight - ISO9613**

31Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver M1 - Walkum Lake Road								
58.9	62.5	58.1	53.2	42.6	38.2	41.5	26.4	-26.3
Receiver M2 - Jackson Schoolhouse Road (East)								
58.6	60.3	54.5	50.4	40.4	34.1	34.4	13.3	
Receiver M3 - Doe Crossing Drive								
56.8	58.1	52.1	48.3	37.9	31.8	28.6	-3.7	
Receiver M4 - Buck Hill Road								
58.3	59.8	52.7	48.0	38.1	32.9	27.7	-7.5	
Receiver M5 - Jackson Schoolhouse Road (South)								
53.9	55.3	47.3	43.0	32.5	25.6	20.6	-25.3	

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Clear River Energy Center - Source List Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
ACC 1 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 1 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Bottom	109.0	72.74	Area	0	4226.63	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACC 2 Top	109.0	72.74	Area	0	4228.07	110.0	113.0	113.0	109.3	106.9	104.3	98.5	93.0	86.9
ACHE 1	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
ACHE 2	99.0	72.92	Area	0	405.93	100.0	103.0	103.0	99.3	96.9	94.3	88.5	83.0	76.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Air Process Skid 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Ammonia Forwarding Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Ammonia Injection Skid 1	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Ammonia Injection Skid 2	98.1	98.10	Point	0		91.0	102.0	96.0	96.0	93.0	92.0	91.0	90.0	86.0
Aux Boiler Building - East Side	-6.6	-30.27	Area	3	234.94	14.8	10.7	5.7	-2.3	-15.3	-27.3	-38.3	-44.3	-44.3
Aux Boiler Building - North Side	-6.0	-30.27	Area	3	268.09	15.3	11.3	6.3	-1.7	-14.7	-26.7	-35.7	-43.7	-43.7
Aux Boiler Building - North Side	-2.6	-30.27	Area	0	579.10	18.7	14.6	9.6	1.7	-11.3	-23.4	-32.4	-40.3	-40.4
Aux Boiler Building - Roof	-6.0	-30.27	Area	3	268.09	15.3	11.3	6.3	-1.7	-14.7	-26.7	-35.7	-43.7	-43.7
Aux Boiler Building - South Side	-6.5	-30.27	Area	3	235.85	14.8	10.7	5.7	-2.2	-15.2	-27.3	-36.3	-44.2	-44.3
Aux Boiler Building - West Side	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler Building Vent Louvers - North	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler Building Vent Louvers - South	86.0	75.22	Area	3	12.00	98.3	95.8	92.8	86.8	83.8	78.8	74.8	73.8	73.8
Aux Boiler FD Fan Inlet	0.0	0.00	Point	0		2.3	2.8	1.7	1.7	-1.2	-5.2	-12.2	-19.2	-24.3
Aux Boiler Stack Exhaust	100.0	100.00	Point	0		102.2	102.2	100.2	99.2	97.2	93.2	90.2	87.2	94.2
Aux Transformer 1 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 1 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 1	82.0	69.16	Area	3	19.21	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 2	82.0	70.16	Area	3	15.27	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 3	82.0	69.18	Area	3	19.13	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Side 4	82.0	70.20	Area	3	15.15	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
Aux Transformer 2 - Top	82.0	66.90	Area	0	32.39	78.7	84.6	86.6	81.7	81.7	75.6	70.6	65.7	58.6
BFW Pump Enclosure 1-Side 1	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9
BFW Pump Enclosure 1-Side 2	97.2	76.92	Area	3	107.28	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Side 3	94.4	76.92	Area	3	56.38	110.5	107.9	104.8	99.9	87.9	81.9	77.9	69.9	63.9

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Clear River Energy Center - Source List Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m, m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
BFW Pump Enclosure 1-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 1-Top	103.5	76.92	Area	0	452.03	119.5	116.9	113.9	106.9	96.9	90.9	96.9	78.9	72.9
BFW Pump Enclosure 2-Side 1	94.4	76.92	Area	3	55.67	110.4	107.8	104.8	99.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 2	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Side 3	94.4	76.92	Area	3	55.43	110.4	107.8	104.7	98.8	87.8	81.8	77.8	69.8	63.8
BFW Pump Enclosure 2-Side 4	97.2	76.92	Area	3	107.52	113.3	110.7	107.6	102.7	90.7	84.7	80.7	72.7	66.7
BFW Pump Enclosure 2-Top	103.4	76.92	Area	0	445.84	119.4	116.9	113.8	108.8	96.9	90.9	86.9	78.9	72.8
Condensate Equipment Bldg 1 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 1 - North Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - Roof	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 1 - South Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 1 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - East Side	77.7	56.70	Area	3	126.65	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
Condensate Equipment Bldg 2 - North Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - Roof	78.0	51.70	Area	0	425.27	92.2	95.2	89.2	83.2	69.2	60.2	53.2	47.2	46.2
Condensate Equipment Bldg 2 - South Side	75.2	56.70	Area	3	70.14	89.4	92.4	86.4	80.4	66.4	57.4	50.4	44.4	43.4
Condensate Equipment Bldg 2 - West Side	77.7	56.70	Area	3	126.59	92.0	94.9	88.9	83.0	69.0	59.9	52.9	47.0	46.0
CTG 1 - Turbine Compartment Vent Fan	103.8	103.79	Point	0	101.6	101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG 2 - Turbine Compartment Vent Fan	103.8	103.79	Point	0	101.6	101.6	102.0	109.9	101.0	98.0	95.0	94.0	98.0	95.0
CTG Air Inlet 1	106.2	82.90	Area	0	213.41	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet 2	106.2	82.93	Area	0	211.99	112.0	105.0	101.0	94.0	90.0	91.0	96.0	104.0	95.0
CTG Air Inlet Duct 1 - North	99.9	84.40	Area	0	35.83	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - South	99.9	84.44	Area	0	35.50	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 1 - Top	99.9	83.26	Area	0	46.57	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - North	99.9	84.32	Area	0	36.52	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - South	99.9	84.29	Area	0	36.74	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Air Inlet Duct 2 - Top	99.9	83.15	Area	0	47.70	111.6	107.0	100.9	100.0	93.0	83.0	97.0	84.0	59.0
CTG Building 1 - East Facade	88.1	57.70	Area	3	1101.55	109.7	103.5	102.8	87.8	77.0	66.7	62.4	59.5	50.6
CTG Building 1 - North Facade	87.0	57.70	Area	3	851.17	108.6	102.4	101.7	86.7	75.9	65.6	61.3	58.4	49.5
CTG Building 1 - Roof	82.9	52.70	Area	0	1047.08	104.5	98.3	97.6	82.6	71.8	61.5	57.2	54.3	45.4
CTG Building 1 - West Facade	88.1	57.70	Area	3	1100.83	109.7	103.5	102.8	87.8	77.0	66.7	62.4	59.5	50.6
CTG Building 1 Vent Louvers - East	82.6	70.00	Area	3	18.00	93.3	88.6	89.9	76.9	76.1	72.8	73.5	77.6	68.7
CTG Building 1 Vent Louvers - North	82.6	70.00	Area	3	18.00	93.3	88.6	89.9	76.9	76.1	72.8	73.5	77.6	68.7



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Clear River Energy Center - Source List Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Wall	Size m,m ²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
CTG Building 1 Vent Louvers - West	63.1	50.55	Area	3	18.00	89.3	80.6	77.9	58.9	47.1	35.8	30.5	29.6	23.7
CTG Building 2 - East Facade	88.1	57.70	Area	3	1100.24	109.7	103.5	102.8	87.8	77.0	66.7	62.4	59.5	50.6
CTG Building 2 - North Facade	87.0	57.70	Area	3	852.46	108.6	102.4	101.7	86.7	75.9	65.6	61.3	58.4	49.5
CTG Building 2 - Roof	82.9	52.70	Area	0	1045.75	104.5	98.3	97.6	82.6	71.8	61.5	57.2	54.3	45.4
CTG Building 2 - West Facade	88.1	57.70	Area	3	1098.21	109.7	103.5	102.8	87.8	77.0	66.7	62.4	59.5	50.6
CTG Building 2 Vent Louvers - East	82.6	70.00	Area	3	18.00	93.3	88.6	89.9	76.9	76.1	72.8	73.5	77.6	68.7
CTG Building 2 Vent Louvers - North	82.6	70.00	Area	3	18.00	93.3	88.6	89.9	76.9	76.1	72.8	73.5	77.6	68.7
CTG Building 2 Vent Louvers - West	82.6	70.00	Area	3	18.00	93.3	88.6	89.9	76.9	76.1	72.8	73.5	77.6	68.7
Demin Water Pump	93.1	93.10	Point	0	86.0	96.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Duct Burner Skid 1	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Duct Burner Skid 2	95.0	95.00	Point	0	87.9	87.9	98.9	92.9	92.9	89.9	88.9	87.9	86.9	82.9
Emergency Diesel Generator - Side 1	8.2	-7.75	Area	3	38.95	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Side 2	8.2	-7.76	Area	3	39.02	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Emergency Diesel Generator - Top	8.2	-8.56	Area	0	46.93	-25.0	-25.0	-12.0	-1.0	2.0	4.0	3.0	-4.0	-13.0
Excitation Transformer 1	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Excitation Transformer 2	80.0	80.00	Point	0	76.7	76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Firs Pump Building - Roof	-4.1	-23.30	Area	0	82.33	10.1	13.1	7.1	1.1	-12.9	-21.9	-28.9	-34.9	-35.9
Firs Pump Building - Side 1	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Firs Pump Building - Side 2	-8.5	-23.30	Area	3	29.99	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Firs Pump Building - Side 3	-5.7	-23.30	Area	3	57.22	8.5	11.5	5.5	-0.5	-14.5	-23.5	-30.5	-36.5	-37.5
Firs Pump Building - Side 4	-8.5	-23.30	Area	3	30.11	5.7	8.7	2.7	-3.3	-17.3	-26.3	-33.3	-39.3	-40.3
Fuel Gas Dewpoint Heater	102.2	85.30	Area	0	49.02	97.9	95.7	83.8	81.7	76.0	77.8	85.5	83.9	103.1
Fuel Gas Metering and Regulating Station	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Fuel Gas Performance Heater 2	93.0	93.00	Point	0	85.9	85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Gas Aftercooler 1	101.0	84.00	Area	0	50.09	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2
Gas Aftercooler 2	101.0	83.86	Area	0	51.73	99.8	102.2	98.1	97.2	96.2	95.2	94.2	93.2	85.2
Gas Compressor Bldg Louvers - E	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - N	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - S	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Bldg Louvers - W	105.7	97.96	Area	3	6.00	102.2	108.7	105.7	104.7	101.7	99.7	97.7	96.7	94.7
Gas Compressor Building - East Side	99.1	76.70	Area	3	173.15	113.3	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
Gas Compressor Building - North Side	97.5	76.70	Area	3	119.51	111.7	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7



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Clear River Energy Center - Source List Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	Src Type	KO-Wall	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Gas Compressor Building - Roof	101.0	76.70	Area	0	269.92	115.3	118.2	112.2	106.3	92.3	83.2	76.2	70.3	69.2
Gas Compressor Building - South Side	97.5	76.70	Area	3	120.04	111.8	114.7	108.7	102.7	88.7	79.7	72.7	66.7	65.7
Gas Compressor Building - West Side	99.1	76.70	Area	3	173.41	113.4	116.3	110.3	104.3	90.3	81.3	74.3	68.3	67.3
GSU 1 - Side 1	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 2	94.0	75.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 3	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Side 4	94.0	75.04	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 1 - Top	94.0	78.02	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 1	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 2	94.0	75.71	Area	3	67.39	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 3	94.0	78.04	Area	3	39.49	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Side 4	94.0	75.71	Area	3	67.51	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
GSU 2 - Top	94.0	78.02	Area	3	39.63	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
HRSG 1 - Body - Side 1	94.0	72.94	Area	0	127.76	90.7	96.6	98.6	93.7	93.7	87.6	82.6	77.7	70.6
HRSG 1 - Body - Side 2	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Exhaust Stack	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 1 - Piping and Valves	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 1 - Stack Walls - Side 1	98.5	80.00	Line	0	71.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 1 - Stack Walls - Side 2	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 3	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 4	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 5	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 6	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 7	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 8	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - Stack Walls - Side 1	65.6	44.84	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 1 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 1 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - Body - Side 1	97.0	66.65	Area	3	1092.60	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4
HRSG 2 - Body - Side 2	97.0	66.65	Area	3	1092.93	106.0	111.4	110.3	99.4	85.4	88.4	75.4	58.4	41.4

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HRSG 2 - Exhaust Stack	102.4	102.42	Point	0		117.6	123.0	116.0	102.0	84.0	81.0	85.1	77.0	47.0
HRSG 2 - Piping and Valves	98.5	80.06	Line	0	70.44	105.6	110.0	108.9	103.0	94.0	90.0	78.0	69.0	62.0
HRSG 2 - Stack Walls - Side 1	65.6	44.81	Area	3	118.98	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 2	65.6	44.90	Area	3	116.55	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 3	65.6	44.70	Area	3	122.00	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 4	65.6	44.55	Area	3	126.11	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 5	65.6	44.74	Area	3	120.89	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 6	65.6	44.86	Area	3	117.59	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 7	65.6	44.78	Area	3	119.83	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - Stack Walls - Side 8	65.6	44.64	Area	3	118.04	85.3	88.2	78.3	63.3	46.3	33.3	30.3	22.3	-7.7
HRSG 2 - T1 - Side 1	96.6	81.17	Area	3	35.17	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Side 2	96.6	81.15	Area	3	35.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T1 - Top	96.6	82.76	Area	0	24.38	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 1	96.6	76.25	Area	3	109.34	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Side 2	96.6	76.25	Area	3	109.36	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG 2 - T2 - Top	96.6	80.37	Area	0	42.32	105.6	111.0	109.9	99.0	85.0	88.0	75.0	58.0	41.0
HRSG Redirc Pump 1	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
HRSG Redirc Pump 2	93.0	93.00	Point	0		85.9	96.9	90.9	90.9	87.9	86.9	85.9	84.9	80.9
Isolation Transformer 1	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Isolation Transformer 2	80.0	80.00	Point	0		76.7	82.6	84.6	79.7	79.7	73.6	68.6	63.7	56.6
Rooftop Vent Fan - Admin 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Admin 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - CTG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0

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Source	PWL dB(A)	Lw'	SrcType	KO-Well	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 3	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 4	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 5	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - STG Bldg 6	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.78	Point	0		95.0	95.0	91.0	87.0	84.0	82.0	80.0	76.0	76.0
Safety Vent	129.0	129.00	Point	0		113.4	120.9	127.0	128.0	118.0	110.8	121.9	123.0	124.0
Scanner Cooling Air Blower 1	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Scanner Cooling Air Blower 2	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Service Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Steam Turbine Bldg 1 - East Facade	85.4	57.93	Area	3	554.75	108.2	104.6	96.5	89.6	77.6	66.6	59.6	49.6	48.6
Steam Turbine Bldg 1 - North Facade	83.7	57.93	Area	3	373.57	106.5	102.9	94.8	87.9	75.9	64.9	57.9	47.9	46.9
Steam Turbine Bldg 1 - Roof	81.8	52.93	Area	0	764.72	104.6	101.0	92.9	86.0	74.0	63.0	56.0	46.0	45.0
Steam Turbine Bldg 1 - South Facade	88.7	57.93	Area	3	1206.17	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 1 - West Facade	85.4	57.93	Area	3	552.09	108.2	104.6	96.5	89.6	77.6	66.6	59.6	49.6	48.6
Steam Turbine Bldg 2 - East Facade	85.4	57.93	Area	3	553.90	108.2	104.6	96.5	89.6	77.6	66.6	59.6	49.6	48.6
Steam Turbine Bldg 2 - North Facade	83.7	57.93	Area	3	374.51	106.5	102.9	94.8	87.9	75.9	64.9	57.9	47.9	46.9
Steam Turbine Bldg 2 - Roof	81.8	52.93	Area	0	764.05	104.6	101.0	92.9	86.0	74.0	63.0	56.0	46.0	45.0
Steam Turbine Bldg 2 - South Facade 1	88.7	57.93	Area	3	1206.17	111.6	108.0	99.9	93.0	81.0	70.0	63.0	53.0	52.0
Steam Turbine Bldg 2 - West Facade	85.4	57.93	Area	3	552.09	108.2	104.6	96.5	89.6	77.6	66.6	59.6	49.6	48.6
STG Building 1 Vent Louvers - East	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 1 Vent Louvers - South 1	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 1 Vent Louvers - South 2	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 1 Vent Louvers - West	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 2 Vent Louvers - East	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 2 Vent Louvers - South 1	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 2 Vent Louvers - South 2	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STG Building 2 Vent Louvers - West	82.3	69.79	Area	3	18.00	94.8	92.7	86.6	81.7	79.7	75.7	73.7	70.7	69.7
STW Heat Exchanger 1	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	96.2	94.2	86.2



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Clear River Energy Center - Source List
Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	Lw'	SrcType	KO-Well	Size m,m²	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
STW Heat Exchanger 2	102.0	90.87	Area	0	12.97	100.8	103.2	99.1	98.2	97.2	96.2	95.2	94.2	86.2
Waste Water Pump	93.1	93.10	Point	0		86.0	97.0	91.0	91.0	88.0	87.0	86.0	85.0	81.0
Water Treatment Building - East Side	78.9	56.70	Area	3	167.69	93.2	96.2	90.2	84.2	70.2	61.2	54.2	48.2	47.2
Water Treatment Building - North Side	83.3	56.70	Area	3	452.35	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - Roof	86.4	56.70	Area	0	939.65	100.7	103.6	97.6	91.7	77.7	66.6	61.6	55.7	54.7
Water Treatment Building - South Side	83.3	56.70	Area	3	453.24	97.5	100.5	94.5	88.5	74.5	65.5	58.5	52.5	51.5
Water Treatment Building - West Side	78.9	56.70	Area	3	167.20	93.2	96.1	90.2	84.2	70.2	61.2	54.2	48.2	47.2
WTB Ventilation Louvers - North Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0
WTB Ventilation Louvers - South Side	90.0	77.96	Area	3	16.00	86.5	93.0	90.0	89.0	86.0	84.0	82.0	81.0	79.0



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Clear River Energy Center - Mean Propagation Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Receiver M1 - Wallum Lake Road												
ACC 1 Bottom	109.0	72.7	0.0	0.0	789.5	-88.9	1.0	-2.9	-3.2	-8.3	0.0	26.7
ACC 1 Top	109.0	72.7	0.0	0.0	790.0	-86.9	0.4	-5.5	-2.2	-6.8	0.0	25.9
ACC 2 Bottom	109.0	72.7	0.0	0.0	706.8	-88.0	0.7	-0.8	-2.9	-8.6	0.0	29.5
ACC 2 Top	109.0	72.7	0.0	0.0	707.4	-88.0	0.3	-5.1	-2.1	-7.2	0.0	27.0
ACHE 1	99.0	72.9	0.0	0.0	751.3	-88.5	2.2	-7.4	-2.2	0.0	0.0	23.1
ACHE 2	99.0	72.9	0.0	0.0	645.5	-87.2	1.8	-5.9	-2.2	0.0	0.8	26.2
Air Process Skid 2	93.0	93.0	0.0	0.0	763.5	-88.6	3.2	-28.0	-4.1	0.0	0.0	-4.5
Air Process Skid 2	93.0	93.0	0.0	0.0	660.2	-87.4	3.0	-26.3	-3.0	0.0	0.0	-0.7
Ammonia Forwarding Pump	93.1	93.1	0.0	0.0	762.2	-88.6	3.1	-7.9	-4.2	0.0	0.1	15.6
Ammonia Injection Skid 1	98.1	98.1	0.0	0.0	714.2	-88.1	3.0	-7.9	-4.2	0.0	0.4	5.6
Ammonia Injection Skid 2	98.1	98.1	0.0	0.0	609.9	-86.7	2.5	-5.2	-5.2	0.0	3.4	26.8
Aux Boiler Building - East Side	-6.6	-30.3	0.0	3.0	675.2	-87.6	1.5	-4.8	-0.4	0.0	0.0	-74.8
Aux Boiler Building - North Side	-6.0	-30.3	0.0	3.0	686.4	-87.7	1.6	-4.1	-0.5	0.0	0.0	-73.7
Aux Boiler Building - Roof	-2.6	-30.3	0.0	0.0	688.2	-87.7	0.9	-5.8	-0.5	0.0	0.6	-75.1
Aux Boiler Building - South Side	-6.0	-30.3	0.0	3.0	690.1	-87.8	1.6	-5.8	-0.3	0.0	0.3	-78.9
Aux Boiler Building - West Side	-6.5	-30.3	0.0	3.0	701.0	-87.9	1.6	-15.2	-0.3	0.0	3.1	-82.2
Aux Boiler Building Vent Louvers - North	86.0	75.2	0.0	3.0	681.9	-87.7	1.9	-3.4	-2.6	0.0	0.0	17.3
Aux Boiler Building Vent Louvers - South	86.0	75.2	0.0	3.0	694.4	-87.8	2.0	-16.0	-0.9	0.0	0.3	6.7
Aux Boiler FD Fan Inlet	0.0	0.0	0.0	0.0	674.3	-87.6	1.5	-5.1	-2.2	0.0	2.5	-71.0
Aux Boiler Stack Exhaust	100.0	100.0	0.0	0.0	695.0	-87.8	0.7	0.0	-4.3	-8.0	0.0	20.6
Aux Transformer 1 - Side 1	82.0	69.2	0.0	3.0	717.7	-88.1	2.2	-26.8	-1.8	0.0	3.5	-5.9
Aux Transformer 1 - Side 2	82.0	70.2	0.0	3.0	713.8	-88.1	2.2	-25.6	-1.4	0.0	1.9	-6.0
Aux Transformer 1 - Side 3	82.0	69.2	0.0	3.0	716.0	-88.1	2.2	-25.1	-1.3	0.0	3.2	-4.1
Aux Transformer 1 - Side 4	82.0	70.2	0.0	3.0	719.9	-88.1	2.2	-26.7	-1.7	0.0	4.4	-4.9
Aux Transformer 1 - Top	82.0	66.9	0.0	0.0	716.9	-88.1	2.0	-24.8	-1.3	0.0	3.5	-6.7
Aux Transformer 2 - Side 1	82.0	69.2	0.0	3.0	617.7	-86.8	1.7	-15.8	-1.0	0.0	8.6	11.7
Aux Transformer 2 - Side 2	82.0	70.2	0.0	3.0	613.7	-86.8	1.7	-9.1	-1.3	0.0	1.0	10.5
Aux Transformer 2 - Side 3	82.0	69.2	0.0	3.0	615.7	-86.8	1.7	-8.4	-1.4	0.0	3.5	13.6
Aux Transformer 2 - Side 4	82.0	70.2	0.0	3.0	619.7	-86.8	1.8	-17.2	-1.0	0.0	9.3	11.0
Aux Transformer 2 - Top	82.0	66.9	0.0	0.0	616.7	-86.8	1.3	-6.0	-1.7	0.0	2.9	11.7
BFW Pump Enclosure 1-Side 1	94.4	76.9	0.0	3.0	758.0	-88.6	1.7	-25.4	-0.7	0.0	0.0	4.4



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Clear River Energy Center - Mean Propagation Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
BFW Pump Enclosure 1-Side 2	97.2	76.9	0.0	3.0	747.2	-68.5	1.7	-25.2	-0.7	0.0	0.3	7.8
BFW Pump Enclosure 1-Side 3	94.4	76.9	0.0	3.0	751.6	-68.5	1.7	-23.3	-0.5	0.0	0.0	6.7
BFW Pump Enclosure 1-Side 4	97.2	76.9	0.0	3.0	762.3	-68.6	1.7	-25.4	-0.7	0.0	0.0	7.2
BFW Pump Enclosure 1-Top	103.5	76.9	0.0	0.0	754.8	-68.5	1.5	-24.1	-0.6	0.0	0.1	11.7
BFW Pump Enclosure 2-Side 1	94.4	76.9	0.0	3.0	654.3	-67.3	1.5	-22.7	-0.5	0.0	0.0	8.4
BFW Pump Enclosure 2-Side 2	97.2	76.9	0.0	3.0	643.1	-67.2	1.5	-22.3	-0.4	0.0	0.8	12.7
BFW Pump Enclosure 2-Side 3	94.4	76.9	0.0	3.0	646.8	-67.2	1.5	-23.5	-0.5	0.0	9.1	16.9
BFW Pump Enclosure 2-Side 4	97.2	76.9	0.0	3.0	657.8	-67.4	1.6	-25.3	-0.6	0.0	0.0	8.5
BFW Pump Enclosure 2-Top	103.4	76.9	0.0	0.0	650.5	-67.3	1.1	-20.3	-0.4	0.0	0.8	17.4
Condensate Equipment Bldg 1 - East Side	77.7	56.7	0.0	3.0	745.5	-68.4	1.9	-7.0	-0.6	0.0	0.0	6.7
Condensate Equipment Bldg 1 - North Side	75.2	56.7	0.0	3.0	747.4	-68.5	1.9	-17.5	-0.3	0.0	0.5	-5.7
Condensate Equipment Bldg 1 - Roof	78.0	51.7	0.0	0.0	752.7	-68.5	1.6	-7.8	-0.6	0.0	0.2	2.8
Condensate Equipment Bldg 1 - South Side	75.2	56.7	0.0	3.0	758.0	-68.6	1.9	-15.2	-0.4	0.0	0.5	-3.6
Condensate Equipment Bldg 2 - East Side	77.7	56.7	0.0	3.0	759.8	-68.6	1.9	-18.2	-0.4	0.0	1.1	-3.5
Condensate Equipment Bldg 2 - North Side	77.7	56.7	0.0	3.0	862.8	-67.4	1.6	-6.0	-0.6	0.0	0.0	8.3
Condensate Equipment Bldg 2 - Roof	75.2	56.7	0.0	3.0	864.0	-67.4	1.6	-6.1	-0.6	0.0	0.0	5.7
Condensate Equipment Bldg 2 - South Side	78.0	51.7	0.0	0.0	869.8	-67.5	1.0	-5.6	-0.5	0.0	0.0	5.4
Condensate Equipment Bldg 2 - West Side	75.2	56.7	0.0	3.0	875.9	-67.6	1.7	-10.2	-0.3	0.0	0.0	1.7
Condensate Equipment Bldg 2 - East Side	77.7	56.7	0.0	3.0	876.8	-67.6	1.7	-13.0	-0.3	0.0	0.0	1.5
CTG 1 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	739.2	-68.4	3.2	-6.7	-5.7	0.0	0.0	26.2
CTG 2 - Turbine Compartment Vent Fan	103.8	103.8	0.0	0.0	637.2	-67.1	2.9	-7.5	-4.5	0.0	0.0	27.6
CTG Air Inlet 1	106.2	82.9	0.0	0.0	769.2	-68.7	3.2	-26.9	-8.4	0.0	0.1	5.5
CTG Air Inlet 2	106.2	82.9	0.0	0.0	866.4	-67.5	2.8	-26.1	-7.1	0.0	0.2	8.4
CTG Air Inlet Duct 1 - North	99.9	84.4	0.0	0.0	750.4	-68.5	2.7	-25.3	-2.8	0.0	1.3	7.3
CTG Air Inlet Duct 1 - South	99.9	84.4	0.0	0.0	752.0	-68.5	2.7	-26.1	-3.3	0.0	1.0	5.7
CTG Air Inlet Duct 1 - Top	99.9	83.3	0.0	0.0	751.3	-68.5	2.4	-26.6	-3.7	0.0	0.1	3.6
CTG Air Inlet Duct 2 - North	99.9	84.3	0.0	0.0	647.7	-67.2	2.2	-23.3	-2.2	0.0	1.0	10.3
CTG Air Inlet Duct 2 - South	99.9	84.3	0.0	0.0	649.7	-67.2	2.2	-25.2	-2.5	0.0	0.0	7.1
CTG Air Inlet Duct 2 - Top	96.9	83.2	0.0	0.0	649.4	-67.2	2.0	-26.7	-3.6	0.0	0.9	5.3
CTG Building 1 - East Facade	88.1	57.7	0.0	3.0	718.8	-68.1	0.8	-5.0	-0.3	0.0	0.0	18.4
CTG Building 1 - North Facade	87.0	57.7	0.0	3.0	727.6	-68.2	0.8	-6.7	-0.3	0.0	0.0	15.8
CTG Building 1 - Roof	82.9	52.7	0.0	0.0	733.1	-68.3	-0.1	-4.7	-0.4	0.0	0.2	9.6

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Source	PWL dB(A)	PWL/Unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
CTG Building 1 - West Facade	88.1	57.7	0.0	3.0	746.3	-68.5	0.8	-17.6	-0.3	0.0	0.0	5.6
CTG Building 1 Vent Louvers - East	82.6	70.0	0.0	3.0	719.5	-68.1	1.8	-6.6	-2.6	0.0	0.0	10.0
CTG Building 1 Vent Louvers - North	82.6	70.0	0.0	3.0	719.5	-68.1	1.8	-14.1	-1.1	0.0	0.2	4.2
CTG Building 1 Vent Louvers - West	63.1	50.6	0.0	3.0	742.9	-68.4	1.3	-17.2	-0.2	0.0	0.0	-18.4
CTG Building 2 - East Facade	88.1	57.7	0.0	3.0	616.4	-66.8	0.5	-1.3	-0.3	0.0	0.0	23.2
CTG Building 2 - North Facade	87.0	57.7	0.0	3.0	624.3	-66.9	0.6	-1.9	-0.3	0.0	0.0	21.5
CTG Building 2 - Roof	82.9	52.7	0.0	0.0	630.5	-67.0	0.0	-4.6	-0.3	0.0	0.0	10.9
CTG Building 2 - West Facade	88.1	57.7	0.0	3.0	643.6	-67.2	0.5	-14.5	-0.2	0.0	0.0	9.7
CTG Building 2 Vent Louvers - East	82.6	70.0	0.0	3.0	617.4	-66.8	1.5	-0.1	-5.4	0.0	0.0	14.8
CTG Building 2 Vent Louvers - North	82.6	70.0	0.0	3.0	616.4	-66.8	1.5	-0.1	-5.4	0.0	1.4	16.2
CTG Building 2 Vent Louvers - West	82.6	70.0	0.0	3.0	639.7	-67.1	1.5	-20.4	-1.6	0.0	0.0	-2.1
Demin Water Pump	93.1	93.1	0.0	0.0	675.5	-67.6	3.1	-24.9	-2.0	0.0	0.5	2.2
Duct Burner Skid 1	95.0	95.0	0.0	0.0	717.4	-68.1	3.0	-25.2	-2.1	0.0	2.8	5.4
Duct Burner Skid 2	95.0	95.0	0.0	0.0	613.7	-66.8	2.5	-3.6	-3.8	0.0	1.8	25.2
Emergency Diesel Generator - Side 1	8.2	-7.7	0.0	3.0	683.7	-67.7	3.3	-28.3	-3.9	0.0	2.1	-83.3
Emergency Diesel Generator - Side 2	8.2	-7.8	0.0	3.0	680.2	-67.6	3.3	-28.2	-3.8	0.0	1.2	-83.9
Emergency Diesel Generator - Top	8.2	-8.6	0.0	0.0	682.0	-67.7	3.1	-27.5	-3.7	0.0	2.8	-84.8
Excitation Transformer 1	80.0	80.0	0.0	0.0	718.7	-68.1	2.2	-24.5	-1.3	0.0	2.8	-8.9
Excitation Transformer 2	80.0	80.0	0.0	0.0	617.1	-66.8	1.6	-5.3	-2.2	0.0	2.4	9.6
Fire Pump Building - Roof	-4.1	-23.3	0.0	0.0	630.7	-67.0	1.2	-5.5	-0.5	0.0	0.0	-76.0
Fire Pump Building - Side 1	-5.7	-23.3	0.0	3.0	633.9	-67.0	1.8	-11.8	-0.3	0.0	0.0	-80.1
Fire Pump Building - Side 2	-8.5	-23.3	0.0	3.0	631.3	-67.0	1.8	-6.6	-0.4	0.0	0.0	-77.7
Fire Pump Building - Side 3	-5.7	-23.3	0.0	3.0	627.3	-66.9	1.7	-6.4	-0.5	0.0	0.0	-74.9
Fire Pump Building - Side 4	-8.5	-23.3	0.0	0.0	630.0	-67.0	1.8	-6.4	-0.5	0.0	0.0	-77.7
Fuel Gas Dewpoint Heater	102.2	85.3	0.0	0.0	795.5	-69.0	3.9	-28.8	-15.5	0.0	0.0	-7.2
Fuel Gas Metering and Regulating Station	93.0	93.0	0.0	0.0	798.2	-69.0	3.9	-28.7	-8.8	0.0	0.0	-9.7
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	645.0	-67.2	3.0	-26.6	-3.1	0.0	0.0	-1.0
Fuel Gas Performance Heater 2	93.0	93.0	0.0	0.0	748.2	-68.5	3.2	-26.0	-4.1	0.0	0.0	-4.4
Gas Aftercooler 1	101.0	84.0	0.0	0.0	806.0	-69.1	3.2	-27.6	-3.9	0.0	0.0	3.6
Gas Aftercooler 2	101.0	83.9	0.0	0.0	809.0	-69.2	3.2	-27.7	-4.0	0.0	0.0	3.4
Gas Compressor Bldg Louvers - E	105.7	98.0	0.0	3.0	784.3	-68.9	2.9	-27.1	-3.1	0.0	0.0	12.6
Gas Compressor Bldg Louvers - N	105.7	98.0	0.0	3.0	790.8	-69.0	2.9	-27.3	-3.3	0.0	0.0	12.0



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Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Gas Compressor Bldg Louvers - S	105.7	98.0	0.0	3.0	781.0	-68.0	2.9	-27.6	-3.6	0.0	0.0	11.6
Gas Compressor Bldg Louvers - W	105.7	98.0	0.0	3.0	797.4	-68.0	2.9	-27.6	-3.6	0.0	0.0	11.5
Gas Compressor Building - East Side	99.1	76.7	0.0	3.0	784.1	-68.9	1.7	-16.1	-0.3	0.0	0.0	18.5
Gas Compressor Building - North Side	97.5	76.7	0.0	3.0	788.5	-68.9	1.7	-16.6	-0.3	0.0	0.0	16.4
Gas Compressor Building - Roof	101.0	76.7	0.0	0.0	791.0	-68.0	1.2	-17.7	-0.4	0.0	0.0	15.1
Gas Compressor Building - South Side	97.5	76.7	0.0	3.0	793.2	-68.0	1.7	-19.5	-0.3	0.0	0.0	13.4
Gas Compressor Building - West Side	99.1	76.7	0.0	3.0	797.6	-68.0	1.7	-21.3	-0.4	0.0	0.0	13.1
GSU 1 - Side 1	94.0	75.7	0.0	3.0	723.0	-68.2	2.1	-26.4	-1.7	0.0	1.4	4.2
GSU 1 - Side 2	94.0	78.0	0.0	3.0	714.6	-68.1	2.1	-25.1	-1.5	0.0	0.2	4.8
GSU 1 - Side 3	94.0	75.7	0.0	3.0	720.1	-68.1	2.1	-26.3	-1.6	0.0	1.4	4.5
GSU 1 - Side 4	94.0	78.0	0.0	3.0	728.5	-68.2	2.1	-26.5	-1.8	0.0	2.5	5.2
GSU 1 - Top	94.0	72.9	0.0	0.0	721.4	-68.2	1.8	-23.9	-1.3	0.0	1.9	4.3
GSU 2 - Side 1	94.0	75.7	0.0	3.0	623.4	-66.9	1.6	-13.1	-1.2	0.0	0.3	17.7
GSU 2 - Side 2	94.0	78.0	0.0	3.0	615.0	-66.8	1.2	-1.9	-2.6	0.0	0.0	27.0
GSU 2 - Side 3	94.0	75.7	0.0	3.0	620.1	-66.8	1.6	-6.8	-2.1	0.0	0.5	23.3
GSU 2 - Side 4	94.0	78.0	0.0	3.0	628.6	-67.0	1.7	-18.3	-1.0	0.0	2.0	14.4
GSU 2 - Top	94.0	72.9	0.0	0.0	621.5	-66.9	1.1	-6.3	-1.7	0.0	1.7	22.0
HRSG 1 - Body - Side 1	97.0	66.6	0.0	3.0	730.9	-68.3	0.7	-15.6	-0.4	0.0	0.0	15.5
HRSG 1 - Body - Side 2	97.0	66.6	0.0	3.0	720.4	-68.1	0.7	-4.2	-0.7	0.0	0.0	27.8
HRSG 1 - Exhaust Stack	102.4	102.4	0.0	0.0	724.6	-68.2	2.0	0.0	-0.4	-3.6	0.0	32.3
HRSG 1 - Piping and Valves	98.5	80.0	0.0	0.0	744.6	-68.4	0.5	-17.1	-0.5	0.0	0.2	13.1
HRSG 1 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	721.3	-68.2	2.0	-0.8	-0.1	0.0	0.0	1.5
HRSG 1 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	719.5	-68.1	2.0	-1.5	-0.2	0.0	0.0	0.8
HRSG 1 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	719.1	-68.1	2.0	-3.4	-0.2	0.0	0.0	-1.2
HRSG 1 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	720.4	-68.1	2.0	-3.7	-0.2	0.0	0.0	-1.5
HRSG 1 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	722.6	-68.2	2.0	-4.4	-0.2	0.0	0.0	-2.2
HRSG 1 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	724.4	-68.2	2.0	-6.2	-0.1	0.0	0.0	-3.9
HRSG 1 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	724.7	-68.2	2.0	-6.9	-0.1	0.0	0.0	-4.7
HRSG 1 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	723.5	-68.2	2.0	-8.4	-0.2	0.0	0.0	-6.2
HRSG 1 - T1 - Side 1	96.6	81.2	0.0	3.0	734.5	-68.3	1.7	-18.1	-0.4	0.0	0.5	15.1
HRSG 1 - T1 - Side 2	96.6	81.2	0.0	3.0	727.2	-68.2	1.6	-11.1	-0.4	0.0	1.0	22.6
HRSG 1 - T1 - Top	96.6	82.8	0.0	0.0	731.2	-68.3	1.0	-13.0	-0.4	0.0	2.1	18.0

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Clear River Energy Center - Mean Propagation Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
HRSG 1 - T2 - Side 1	96.6	76.2	0.0	3.0	734.5	-68.3	1.0	-17.5	-0.4	0.0	0.1	14.5
HRSG 1 - T2 - Side 2	96.6	76.2	0.0	3.0	725.7	-68.2	1.0	-8.3	-0.4	0.0	0.0	23.8
HRSG 1 - T2 - Top	96.6	80.4	0.0	0.0	730.5	-68.3	-0.1	-7.5	-0.5	0.0	0.3	20.6
HRSG 2 - Body - Side 1	97.0	66.6	0.0	3.0	626.6	-68.9	0.4	-15.8	-0.3	0.0	0.0	17.5
HRSG 2 - Body - Side 2	97.0	66.6	0.0	3.0	616.2	-66.8	0.5	-1.3	-0.7	0.0	0.0	31.8
HRSG 2 - Exhaust Stack	102.4	102.4	0.0	0.0	620.3	-66.8	1.7	0.0	-0.3	-3.6	0.0	33.4
HRSG 2 - Piping and Valves	98.5	80.1	0.0	0.0	640.8	-67.1	0.2	-13.2	-0.5	0.0	2.7	20.6
HRSG 2 - Stack Walls - Side 1	65.6	44.8	0.0	3.0	616.7	-66.8	1.9	-0.8	-0.1	0.0	0.0	2.7
HRSG 2 - Stack Walls - Side 2	65.6	44.9	0.0	3.0	614.9	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.3
HRSG 2 - Stack Walls - Side 3	65.6	44.7	0.0	3.0	614.4	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 4	65.6	44.6	0.0	3.0	615.5	-66.8	1.9	-1.3	-0.2	0.0	0.0	2.2
HRSG 2 - Stack Walls - Side 5	65.6	44.7	0.0	3.0	617.8	-66.8	1.9	-4.4	-0.1	0.0	0.0	-0.9
HRSG 2 - Stack Walls - Side 6	65.6	44.9	0.0	3.0	619.6	-66.8	1.9	-6.1	-0.1	0.0	0.0	-2.6
HRSG 2 - Stack Walls - Side 7	65.6	44.8	0.0	3.0	620.0	-66.8	1.9	-7.0	-0.1	0.0	0.0	-3.5
HRSG 2 - Stack Walls - Side 8	65.6	44.8	0.0	3.0	618.9	-66.8	1.9	-7.8	-0.1	0.0	0.0	-4.3
HRSG 2 - T1 - Side 1	96.6	81.2	0.0	3.0	631.2	-67.0	1.0	-10.7	-0.2	0.0	0.5	23.2
HRSG 2 - T1 - Side 2	96.6	81.2	0.0	3.0	624.0	-66.9	1.2	-3.9	-0.9	0.0	2.0	31.2
HRSG 2 - T1 - Top	96.6	82.8	0.0	0.0	627.9	-66.9	0.7	-5.4	-0.4	0.0	2.4	27.0
HRSG 2 - T2 - Side 1	96.6	76.2	0.0	3.0	631.1	-67.0	0.6	-12.3	-0.3	0.0	0.1	20.8
HRSG 2 - T2 - Side 2	96.6	76.2	0.0	3.0	622.3	-66.9	0.7	-1.8	-0.7	0.0	0.7	31.6
HRSG 2 - T2 - Top	96.6	80.4	0.0	0.0	627.4	-66.9	0.0	-6.0	-0.6	0.0	0.7	23.7
HRSG Recirc Pump 1	93.0	93.0	0.0	0.0	711.2	-68.0	3.1	-25.3	-2.6	0.0	8.1	7.3
HRSG Recirc Pump 2	80.0	80.0	0.0	0.0	606.4	-66.6	2.8	-7.3	-3.6	0.0	2.2	20.6
Isolation Transformer 1	80.0	80.0	0.0	0.0	703.7	-67.9	2.1	-25.4	-1.3	0.0	8.5	-3.9
Isolation Transformer 2	80.0	80.0	0.0	0.0	601.3	-66.6	1.2	-2.9	-2.8	0.0	2.4	11.4
Rooftop Vent Fan - Admin 1	87.8	87.8	0.0	0.0	569.5	-66.1	2.7	-4.4	-4.9	0.0	0.0	15.2
Rooftop Vent Fan - Admin 2	87.8	87.8	0.0	0.0	612.2	-66.7	2.8	-7.5	-2.7	0.0	0.0	13.7
Rooftop Vent Fan - Admin 3	87.8	87.8	0.0	0.0	589.4	-66.4	2.8	-7.5	-2.7	0.0	0.0	13.9
Rooftop Vent Fan - Admin 4	87.8	87.8	0.0	0.0	614.6	-66.8	2.8	-7.6	-2.8	0.0	1.4	14.9
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	670.7	-67.5	2.8	-2.0	-5.1	0.0	0.0	16.0
Rooftop Vent Fan - Condensate Bldg 2	87.8	87.8	0.0	0.0	753.2	-68.5	3.0	-6.0	-2.7	0.0	0.0	13.6
Rooftop Vent Fan - CTG Bldg 1	87.8	87.8	0.0	0.0	735.3	-68.3	3.0	-6.8	-2.7	0.0	0.0	12.9



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Clear River Energy Center - Mean Propagation Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
Rooftop Vent Fan - CTG Bldg 2	87.8	87.8	0.0	0.0	724.3	-88.2	2.9	-6.5	-2.7	0.0	0.0	13.3
Rooftop Vent Fan - CTG Bldg 3	87.8	87.8	0.0	0.0	728.3	-88.2	2.9	-3.1	-3.4	0.0	0.0	16.0
Rooftop Vent Fan - CTG Bldg 4	87.8	87.8	0.0	0.0	632.6	-87.0	2.7	-7.4	-2.9	0.0	0.0	13.2
Rooftop Vent Fan - CTG Bldg 5	87.8	87.8	0.0	0.0	627.4	-86.9	2.7	-0.7	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - CTG Bldg 6	87.8	87.8	0.0	0.0	622.8	-86.9	2.7	-0.8	-4.0	0.0	0.0	18.8
Rooftop Vent Fan - Gas Compressor Bldg 1	87.8	87.8	0.0	0.0	790.3	-88.9	3.1	-17.9	-1.3	0.0	0.0	2.7
Rooftop Vent Fan - Gas Compressor Bldg 2	87.8	87.8	0.0	0.0	791.8	-89.0	3.1	-18.6	-1.5	0.0	0.0	1.9
Rooftop Vent Fan - Gas Compressor Bldg 3	87.8	87.8	0.0	0.0	793.1	-89.0	3.1	-18.3	-1.5	0.0	0.0	2.2
Rooftop Vent Fan - STG Bldg 1	87.8	87.8	0.0	0.0	658.3	-87.4	2.8	-7.5	-2.8	0.0	0.0	12.8
Rooftop Vent Fan - STG Bldg 2	87.8	87.8	0.0	0.0	634.0	-87.0	2.7	-0.7	-4.1	0.0	0.0	18.7
Rooftop Vent Fan - STG Bldg 3	87.8	87.8	0.0	0.0	645.9	-87.2	2.7	-7.5	-2.9	0.0	0.0	12.9
Rooftop Vent Fan - STG Bldg 4	87.8	87.8	0.0	0.0	735.2	-88.3	2.9	-7.2	-2.9	0.0	0.0	12.3
Rooftop Vent Fan - STG Bldg 5	87.8	87.8	0.0	0.0	758.9	-88.6	3.0	-7.8	-3.1	0.0	0.0	11.3
Rooftop Vent Fan - STG Bldg 6	87.8	87.8	0.0	0.0	746.0	-88.4	3.0	-7.1	-2.8	0.0	0.0	12.3
Rooftop Vent Fan - Water Treatment Bldg1	87.8	87.8	0.0	0.0	700.5	-87.9	3.0	-7.7	-3.0	0.0	0.0	12.1
Rooftop Vent Fan - Water Treatment Bldg2	87.8	87.8	0.0	0.0	680.5	-87.6	3.0	-7.1	-2.7	0.0	0.0	13.3
Safety Vent	129.0	129.0	0.0	0.0	608.5	-86.7	1.2	0.0	-7.9	-8.2	0.7	48.1
Scanner Cooling Air Blower 1	93.1	93.1	0.0	0.0	728.1	-88.2	3.2	-5.0	-3.8	0.0	0.0	19.2
Scanner Cooling Air Blower 2	93.1	93.1	0.0	0.0	624.3	-86.9	2.9	-0.1	-4.5	0.0	0.0	24.5
Service Water Pump	93.1	93.1	0.0	0.0	662.7	-87.4	3.0	-29.9	-2.9	0.0	0.3	-0.7
Steam Turbine Bldg 1 - East Facade	85.4	57.9	0.0	3.0	726.9	-88.2	1.2	-7.6	-0.3	0.0	0.0	13.5
Steam Turbine Bldg 1 - North Facade	83.7	57.9	0.0	3.0	757.1	-88.6	1.2	-14.8	-0.3	0.0	0.0	4.2
Steam Turbine Bldg 1 - Roof	81.8	52.9	0.0	3.0	746.8	-88.5	0.2	-6.2	-0.5	0.0	0.2	7.1
Steam Turbine Bldg 1 - South Facade	86.7	57.9	0.0	3.0	749.0	-88.5	1.2	-15.0	-0.2	0.0	0.0	9.3
Steam Turbine Bldg 1 - West Facade	85.4	57.9	0.0	3.0	765.7	-88.7	1.2	-18.3	-0.3	0.0	0.0	2.4
Steam Turbine Bldg 2 - East Facade	85.4	57.9	0.0	3.0	626.1	-86.9	0.9	-1.0	-0.4	0.0	0.0	21.0
Steam Turbine Bldg 2 - North Facade	83.7	57.9	0.0	3.0	655.2	-87.3	1.0	-10.1	-0.2	0.0	0.0	10.0
Steam Turbine Bldg 2 - Roof	81.8	52.9	0.0	3.0	645.7	-87.2	0.2	-4.9	-0.5	0.0	0.0	9.4
Steam Turbine Bldg 2 - South Facade 1	86.7	57.9	0.0	3.0	648.0	-87.2	0.9	-6.3	-0.2	0.0	0.1	16.0
Steam Turbine Bldg 2 - West Facade	85.4	57.9	0.0	3.0	664.1	-87.4	1.0	-16.7	-0.2	0.0	0.0	5.0
STG Building 1 Vent Louvers - East	82.3	69.8	0.0	3.0	726.6	-88.2	1.4	-14.1	-1.0	0.0	0.0	3.4
STG Building 1 Vent Louvers - South 1	82.3	69.8	0.0	3.0	758.9	-88.6	1.5	-21.6	-1.4	0.0	0.0	-4.8

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Clear River Energy Center - Mean Propagation Emergency Steam Release Analysis - A-Weight - ISO9613

Source	PWL dB(A)	PWL/unit dB(A)	Tone dB	Non-Sphere dB	Distance m	Spreading dB	Ground Effect dB	Ins. Loss dB	Air dB	Directivity dB	Reflection dB	SPL dB(A)
STG Building 1 Vent Louvers - South 2	82.3	69.8	0.0	3.0	737.1	-68.3	1.4	-20.4	-1.3	0.0	0.0	-3.3
STG Building 1 Vent Louvers - West	82.3	69.8	0.0	3.0	765.8	-68.7	1.5	-24.0	-1.8	0.0	0.7	-7.0
STG Building 2 Vent Louvers - East	82.3	69.8	0.0	3.0	625.6	-66.9	1.0	0.0	-3.0	0.0	0.0	16.5
STG Building 2 Vent Louvers - South 1	82.3	69.8	0.0	3.0	657.9	-67.4	1.1	-17.2	-1.1	0.0	0.0	0.8
STG Building 2 Vent Louvers - South 2	82.3	69.8	0.0	3.0	636.5	-67.1	1.1	-13.2	-1.2	0.0	0.0	5.0
STG Building 2 Vent Louvers - West	82.3	69.8	0.0	3.0	664.2	-67.4	1.2	-23.4	-1.5	0.0	0.0	-5.9
STW Heat Exchanger 1	102.0	90.9	0.0	0.0	747.9	-66.5	3.1	-28.0	-4.2	0.0	0.0	4.5
STW Heat Exchanger 2	102.0	90.9	0.0	0.0	645.2	-67.2	2.8	-26.0	-3.1	0.0	0.0	8.5
Waste Water Pump	93.1	93.1	0.0	0.0	669.7	-67.5	3.1	-25.8	-2.3	0.0	0.0	0.5
Water Treatment Building - East Side	78.9	56.7	0.0	3.0	660.8	-67.4	1.5	-6.1	-0.5	0.0	0.0	9.5
Water Treatment Building - North Side	83.3	56.7	0.0	3.0	684.3	-67.7	1.5	-4.5	-0.5	0.0	0.0	15.1
Water Treatment Building - Roof	86.4	56.7	0.0	0.0	665.7	-67.7	0.9	-5.6	-0.6	0.0	0.0	13.5
Water Treatment Building - South Side	83.3	56.7	0.0	3.0	684.8	-67.7	1.5	-14.9	-0.3	0.0	0.0	4.8
Water Treatment Building - West Side	78.9	56.7	0.0	3.0	711.6	-68.0	1.6	-15.1	-0.3	0.0	0.0	0.0
WTB Ventilation Louvers - North Side	90.0	78.0	0.0	3.0	679.3	-67.6	2.6	-5.2	-3.1	0.0	0.0	19.6
WTB Ventilation Louvers - South Side	90.0	78.0	0.0	3.0	693.0	-67.8	2.6	-22.9	-2.1	0.0	0.0	2.9



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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: Application of
Invenergy Thermal Development LLC's
Proposal for Clear River Energy Center

Docket No.: SB – 2015-06

**INVENERGY THERMAL DEVELOPMENT LLC's RESPONSES TO
THE TOWN OF BURRILLVILLE'S FIRST SET OF DATA REQUESTS**

1.2: Please explain in detail whether and to what extent the facility will seek relief from the Town's noise ordinance limitations.

RESPONSE: The Project will comply with the A –Weighted broad band limit of 43 dBA which is consistent with approved EFSB Orders for other power plants. This limit will apply to normal steady state operation of the Project. The Project will seek relief from meeting all of the octave band limits for normal operations and from achieving the A –Weighted broad band limit of 43 dBA for transient modes. The expected transient noise limits are shown in our response to question 1.5.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

DATE: March 31, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: Application of
Invenergy Thermal Development LLC's
Proposal for Clear River Energy Center

Docket No.: SB – 2015-06

**INVENERGY THERMAL DEVELOPMENT LLC's RESPONSES TO
THE TOWN OF BURRILLVILLE'S FIRST SET OF DATA REQUESTS**

1.3: Please explain in detail the difference in expected noise levels between start up and shut down operations and normal operations.

RESPONSE: CREC operation is expected to be typical of other base load power generation facilities and should be running at normal operating level more than 80% of the time. This means that start up and shut down will be somewhat frequent events occurring typically once a month during winter and summer conditions and once a week or even daily during the spring and fall. Noise produced from the various components will vary depending upon the plant load and its mode of operation. Noise produced from these components is from motors, pumps and ancillary equipment skids, as summarized in Table 1.3.1 which was included in the Noise Evaluation report included as Appendix E in the EFSB application and modified to show number of components operating or their percent load during normal and start up or shut down conditions.

Table 1.3.1: Major Sources of CREC Noise		
Equipment Description *Denotes located indoors	Normal Operations⁷	Start Up/Shut Down
H Class combustion turbines	2	30%- 50%
Steam Turbine generators	2	30%
Air Cooled Condenser (ACC) - 18 Cells	2	50%
Ammonia Forwarding Pump	1	50%
Ammonia Injection Skids	2	50%
Auxiliary Boiler Building	1	100%
Auxiliary Transformers	2	2
Boiler Feedwater Pumps	2	50%
Closed Cooling Water Heat Exchangers	2	2
Condensate Pumps	2	2
Combustion Turbine Air Inlet Filter Housings	2	2
Combustion Turbine Lube Oil Modules	2	2

⁷ - Quantity active during full load operation. For pumps and compressors installed in sets of 2 or 3, it is assumed that one set will be reserved for backup and remain on standby.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: Application of
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**INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO
THE TOWN OF BURRILLVILLE'S FIRST SET OF DATA REQUESTS**

Combustion Turbine Enclosure Ventilation Fans	2	2
Combustion Turbine Exhaust Diffusers	2	50%
Demin Water Pumps	2	25%
Fuel Gas Compressor After Coolers	2	1
Fuel Gas Dew Point Heater	1	1
Fuel Gas Metering and Regulating Station	1	1
Generator Step-Up Transformers	2	2
Heat Recovery Steam Generators (HRSG)	2	50%
Steam Turbine Bypass Valves	0%	6
HRSG Duct Burner Skids	2	0%
HRSG Exhaust Stack	2	50%
HRSG Piping and Valve Systems	2	50%
Miscellaneous Small Transformers	8	8
Roof-Mounted HVAC Fans	21	21
Scanner Cooling Air Blowers	2	0%
Service Water Pump	1	1
Vacuum Pumps	2	1
Waste Water Pump	1	1

The above table indicates the expected number of components that will operate during normal conditions and during start up and shut down. The expected noise for these two modes of operation and other transient modes of operation is included in the response to Question 1.5 below.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

DATE: March 31, 2016

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1.4: Please explain in detail the expected noise level that will be generated during steam releases.

RESPONSE: Steam releases are considered an upset or emergency condition which is not expected to occur and if it does, it should be an infrequent event. The noise level at the nearest residence is predicted to be 49 dBA.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

DATE: March 31, 2016

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1.5: Please explain in detail the expected noise levels that will be generated during (a) normal operations, (b) startup operations, (c) normal shut down operations, (d) steam releases, and (e) emergency shut down operations. Please provide details for both natural gas operations and fuel oil operations. Please identify the models used to project the noise levels during each such phase of operations (a) through (e).

RESPONSE: As indicated in Section 6.9 of Invenergy's EFSB application and on page 28 of Appendix E a three-dimensional, computer-generated acoustical model of operations activities was developed using SoundPLAN® 7.3/7.4 and industry-standard prediction methods to estimate noise levels at nearby receivers. Noise levels during CREC operations are outlined in the attached report and summarized below:

- a. The expected noise levels that will be generated during normal operations, 43 dBA
- b. Startup operations, 46 dBA
- c. Normal shut down operations, 45 dBA
- d. Steam releases, 49 dBA
- e. Emergency shut down operations, 50 dBA

The noise levels for fuel oil operations are expected to be identical to the noise produced during natural gas operations since fuel oil operations would require the oil pumps and associated water injection pumps to operate in lieu of the gas compressor and all of these pumps are located indoors

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.6: Please explain in detail all noise suppression/mitigation efforts that are being proposed by the facility.

RESPONSE: As indicated in Section 6.9 of Invenergy's EFSB application and on page 34 of Appendix E, the proposed extensive acoustical design of the CREC includes;

- installation of the combustion turbines and steam turbines within buildings;
- high-performance silencers installed within the air intake ductwork of the combustion turbines to reduce high-frequency (spectral) compressor and turbine blade aerodynamic noise;
- silencers installed on fans providing ventilation air for the combustion turbine enclosure compartments;
- low-noise air cooled condensers and closed cooling water heat exchangers;
- combustion turbine exhaust diffuser is located within the building;
- combustion turbine exhaust noise attenuated via the SCR/HRSG units and high-performance exhaust stack silencers;
- auxiliary boiler FD fan intake silencer banks;
- low-noise GSU transformers; thicker casings for the HRSG boilers and transition ducts;
- buildings enclosing the auxiliary boiler, gas compressors, boiler feed water pumps and water treatment equipment;
- acoustical enclosures over the duct burner skirts; acoustically louvered ventilation openings for the auxiliary boiler and generation buildings;

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- the installation of a low-noise steam bypass system including low-noise valves and steam discharge stack resistors (disk stack);
- silencers on startup vents, blowdown and drains tank vents; and silencers on safety release vents.

The specific noise attenuation features included in the CREC design were shown on Table 9 of Appendix E, shown below:

Table 9: Proposed Acoustical Design	
Equipment Item	Control
Air Cooled Condenser	Low-Noise Design
Auxiliary Boiler	Enclosed within a Building
Auxiliary Boiler FD Fan Intake	High-Performance Duct Silencer Banks
Auxiliary Boiler Louvered Ventilation Openings	Acoustical Louvers
Auxiliary Boiler Startup Vent and Blowdown Tank	Vent Silencers
CCW Heat Exchanger	Low-Noise Design
Combustion Turbine Air Intakes	High-Performance Air Intake Silencers
Combustion Turbine	Enclosed within a Building
Combustion Turbine Ventilation	Ventilation System Silencers
Combustion Turbine Exhaust Diffusers	Enclosed within a Building
Combustion Turbine Exhausts	Exhaust Mitigated via SCR/HRSGs and High-Performance Exhaust Stack Silencers
Duct Burner Skids	Acoustical Enclosures
Fuel Gas Compressors	Enclosed within a Building
Generation Building Louvered Ventilation Openings	Acoustical Louvers
GSU Transformers	Low-Noise Design
HRSG Blowdown Tanks	Vent Silencers

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HRSB Boiler Feedwater Pumps	Enclosed within a Building
HRSB Boilers and Transition Ducts	Thicker Casing
Steam Safety Release Vents	Vent Silencers
Steam-Turbine	Enclosed within a Building
Steam turbine bypass system	Low Noise valves and steam discharge stack resisters
Steam Turbine Drains Tank	Vent Silencers
Water Treatment Equipment	Enclosed within a Building

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault
Acoustics, Inc. and John Niland, Director, Business Development,
Invenergy

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1.7: Please explain in detail the additional noise to be generated by the proposed on site compressor.

RESPONSE: The noise generated from the on-site gas compressor has been included in Invenergy's estimate for the Project, as such there will be no additional noise generated from the on-site gas compressor. The compressor will be located in a building which will have necessary acoustical features to meet the noise limits CREC is proposing.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.8: Please explain whether the facility will be able to maintain compliance with the Town's overall 43 dBA noise limit (applicable at the nearest houses) during all non-emergency operating conditions, including most importantly, normal startups and shut downs.

RESPONSE: Please see response to questions 1.2 and 1.5 above.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy.

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1.9: Please explain why is there no mention of the potential noise impact during normal startup and shut down in the noise section of the permit application.

RESPONSE: Invenergy considered noise during start up and shut down to be a transient condition. The start and shut down plant design and expected noise levels that would result from those operating scenarios are dependent upon the Power Island equipment supplier, which had not been selected at that time. The specification for the Power Island ("PI") equipment included requirements related to the noise levels; however, Invenergy needed specific design details from the bidders and the selected PI supplier in order to fully determine expected noise for this mode of operation. It was always our intent to provide this information when it was available.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.10: Does Invenergy, or its parent or related company, operate another combined cycle plant that uses an air cooled condenser (ACC)? If so, please identify the plant and the noise mitigation installations in each such plant.

RESPONSE: Invenergy does not have any other combined cycle plants that use ACCs in operation. ACCs use a series of fans that blow air over a heat exchanger, (much like an automobile's radiator) and the fans and heat exchangers are arranged in cells. The attenuation features that are utilized on ACCs are low noise fans, which are specially designed fan blades that operate at a lower speed and are used in conjunction with the ACC heat exchanger surface, which is increased to accommodate the lower fan speed and remove the required heat.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.11: Do you agree that the noise generated during the steam turbine bypass phase of startup-when high pressure steam is injected directly into the vacuum of the main duct of the ACC is going to be extremely loud if no mitigation efforts are made? Please provide details.

RESPONSE: Yes, bypass operation can produce loud noise if not properly designed. The bypass valves will be located indoors and will utilize low noise design features so as to achieve the predicted levels.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.12: Please detail all steps Invenergy plans to take, such as for example, with the bypass valve, hogging air injector and drain vent, to maintain the sound level below 43 dBA during normal startups.

RESPONSE: The bypass valves will be located indoors and will utilize low noise design features, including low-noise valves and steam discharge stack resisters, so as to comply with the proposed limits. The vents from the hogging air ejector vent will include a silencer. Invenergy has taken reasonable steps to control noise levels during start up and shut down, and Invenergy anticipates that it can achieve 46 dBA.

RESPONDENT: Mike Hankard, Senior Acoustical Consultant, Michael Theriault Acoustics, Inc. and John Niland, Director, Business Development, Invenergy

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1.13: Please provide details regarding the expected noise to be generated by traffic (truck and other vehicles) during construction and routine operations.

RESPONSE: As indicated in Section 6.9 of our EFSB application and on page 31 of Appendix E, in general, it is anticipated that construction noise levels will be near or below current daytime ambient noise levels (L_{Aeq}) at residences. While construction noise is likely to be occasionally discernible, it is not expected to increase ambient noise levels significantly. The average individual is likely to tolerate construction noise given its temporary nature and that the majority of construction will take place during daytime hours (i.e., when the risk of sleep disturbance and interference with relaxation activities is low). Any nighttime or weekend construction activities will likely be similar to the 'finishing' phase of construction, which is typically 10 decibels lower than other phases. Also, the size of a nighttime/weekend work force would be significantly smaller than during typical daytime weekday hours, thereby further reducing noise levels. As such, construction of the CREC is not expected to result in any significant community noise impact. The noise levels from traffic during normal operations will be significantly less due to the much lower amount of traffic on the site.

RESPONDENT: John Niland, Director, Business Development, Invenergy and
Maureen Chlebek, P.E., PTOE, Senior Project Manager, McMahon
Associates

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1.14: Please identify the details of the expected noise to be generated during construction operations.

RESPONSE:

As indicated in Section 6.9 of our EFSB application and on page 30 of Appendix E, as summarized in Table 11 and Appendix N6, (*Construction Noise Modeling Results*) construction noise levels (L_{Aeq}) are predicted to range from a low of 27 dBA to a high of 53 dBA at residential receivers. These levels represent those observed outdoors, and a home or building would provide significant reduction. Specifically, noise levels within a home would be up to 27 dBA lower assuming closed windows. Even with open windows, indoor levels would be up to 15 dBA lower than levels observed outside.⁸

Table 11: Projected CREC Construction Noise Levels (L_{Aeq})*						
Location	Construction Phase					Existing Daytime Ambient Range (L_{Aeq})
	Grading & Excavation	Concrete Pouring	Steel Erection	Equipment Installation	Finishing	
M1	49	45	49	44	39	52 to 53
M2	53	49	53	48	43	50 to 52
M3	41	37	41	36	31	36 to 44
M4	47	43	47	42	37	50 to 51
M5	37	33	37	32	27	45 to 52

*Rounded to the nearest whole decibel

As such, construction of the CREC is not expected to result in any significant community noise impact.

RESPONDENT: John Niland, Director, Business Development, Invenergy and
Maureen Chlebek, P.E., PTOE, Senior Project Manager,
McMahon Associates

DATE: March 31, 2016

⁸ - *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, United States Environmental Protection Agency, Office of Noise Abatement and Control, USEPA Report 550/9-74-004 (March 1974).

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1.15: Please provide any study or other information in Invenergy's possession regarding traffic issues that may arise during and after construction, including identifying the access road that will be used during and after construction, the location and details of the proposed road(s), and the impact of traffic on the neighborhood during and after construction.

RESPONSE: As stated in Section 3.9.1 of our EFSB application, the Project will convert an existing dirt road/path to a new site access road that will connect the Facility to the Wallum Lake Road (Route 100). This road is designed as a Class A road to handle equipment loads during and after plant construction. The access road is shown on Figure 3.4-3 of the EFSB application. Traffic issues that may arise during and after construction are discussed in Section 6.8 of our EFSB application. The Project will commence construction in the first quarter of 2017, and the expected construction duration is 30 months with commercial operation in June of 2019. Construction personnel will consist of construction craft (laborers, welders, etc.) and staff (professional staff, engineers administrative, etc.). Figure 6.8-1 shows the Heavy Haul and Main Road, Wallum Lake Road, the New Entrance Road, proposed parking and the equipment laydown area. Most staff traffic will occur between 6:00am-7:00 am with change of shift at 5:00pm-6:00pm. Staff will peak at approximately 150 people in the second quarter of 2018. Craft will also peak at 440 people the second quarter of 2018.

The operation of the Facility will have minimal, if any, impact on traffic. Employees will commute to and from the Facility on a daily basis but these vehicle trips will be spread out over multiple work shifts. There will daily deliveries of supplies and equipment but such deliveries will be intermittent. There will be delivery of ULSD by truck to the Facility when ULSD is fired; however as described previously this will likely occur no more than a few days per year so any impact on traffic resulting from such deliveries would be temporary. Invenergy is committed to identifying and mitigating potential traffic related issues associated with the construction and operation of the Facility. Invenergy and its contractors will coordinate closely with the Rhode Island Department of Transportation

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("RIDOT") and the Town of Burrillville to develop and implement a pragmatic Traffic Management Plan ("TMP"). The TMP will alleviate the impacts of an increase in traffic volume in a predominantly rural community. Invenergy is devoted to working with the Town of Burrillville to maintain the safety and wellbeing of its citizens and the integrity of its infrastructure throughout the construction and operation of this Project. Invenergy has engaged the services of a Expert Traffic consultant who will supplement this response when the report he is preparing is finished.

RESPONDENT: John Niland, Director, Business Development, Invenergy and
Maureen Chlebek, P.E., PTOE, Senior Project Manager, McMahon
Associates

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1.16: Please identify in detail the company's security plans during and after construction.

RESPONSE: The Project will have a security gate and will have 24/7 security during both construction and operations. During construction, the property will be fenced in with 24-hour security at a guard shack located at the entrance.

Post construction, a permeant security fence that will be eight feet tall, topped with barbed wire, card readers will be installed at critical points along with CCTV, with monitoring from the control room.

RESPONDENT: John Niland, Director, Business Development, Invenergy

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1.17: Please identify in detail the company's plans regarding water quality, water use, storm water run off, and waste water.

RESPONSE: The Project's impact to water quality is detailed in Section 6.2 of the EFSB application. We also are employing the use of ACC's to minimize water consumption for the project. Table 6.2-3 summarizes the Project's projected water use and wastewater discharge during a typical summer day firing natural gas, during an annual average day firing natural gas, and during a winter day with one combustion turbine firing natural gas and one combustion turbine firing ultra-low sulfur diesel ("ULSD") fuel. The Facility will only fire ULSD when the regional natural gas supply is curtailed during very limited periods in the winter months. Invenergy has met with RIDEM to discuss the Project's water use and wastewater discharge, and is working with RIDEM to identify measures to reduce Facility water use, particularly during the summer months when stream depletion can be a concern.

The Project's preliminary Stormwater Management Plan ("SMP") is detailed in Section 6.4 of the EFSB application. The Project SMP will meet the requirements of the RI Stormwater Design and Installation Standards Manual. Invenergy is working with RIDEM to ensure that the final SMP developed for the Project meets all applicable standards and is fully protective of the water quality of nearby surface waters.

Invenergy will apply for a Wetlands Alteration Permit, a Water Quality Certification, a RIPDES Construction General Permit, and a Multi-Sector General Permit from RIDEM and an Individual Permit from the ACOE to ensure that Project impacts to wetlands, surface water, and groundwater during both construction and operation will be minimized. Invenergy will also apply for a Wastewater Pre-Treatment Permit and an Order of Approval from RIDEM, and an Industrial Wastewater Permit from the Town of Burrillville to ensure that the wastewater discharge from the Facility meets all applicable water quality standards.

As detailed in Section 6.2 of the EFSB Application, and through the completion of the required permitting processes with RIDEM, the

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ACOE, and the Town of Burrillville, the quality of wetlands, surface waters, and groundwater in the area surrounding the Facility will be protected and maintained, both during Project construction and operation. As detailed in Section 6.2 of the EFSB application, with the installation of the treatment system on PUD Well 3A, the operation of the Facility will actually improve the quality of groundwater in the areas affected by the contamination event, which occurred previously.

RESPONDENT: John Niland, Director, Business Development, Invenergy
Michael Feinblatt, ESS Group, Inc. and
Craig Wood, ESS Group, Inc.

DATE: March 31, 2016

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1.18: Please identify any study or other information the company has regarding the expected impact of air emissions on the air quality in the homes in the immediate neighborhood of the proposed facility.

RESPONSE: The Project's impact to air quality in the area surrounding the Facility is detailed in Section 6.1 of the EFSB application. The Project will require a Major Source Air Permit from RIDEM prior to its construction. RIDEM will require the Project to comply with all applicable state and federal air pollution control regulations, implement Best Available Control Technology and the Lowest Achievable Emission Rate for applicable pollutants, fully offset its NOX and VOC emissions, and complete an air quality impact assessment and health risk assessment prior to approval. The Major Source Air Permit application process will ensure that the Project's impacts to air quality in the area surrounding the Facility have been minimized to the greatest extent that is technologically feasible for such a source.

Section 6.1.5 details the air quality impact assessment completed for the Project. This assessment concluded that the maximum predicted criteria pollutant air quality impacts resulting from Facility operation, when combined with existing background concentrations, and the maximum impact concentrations from other nearby sources, will not exceed any of the National Ambient Air Quality Standards ("NAAQS") at any location at or beyond the property line of the Facility. The NAAQS, which have been established by the EPA and adopted by RIDEM, are ambient concentration which have been determined through health studies to be protective of human health and welfare, including the most vulnerable of the population, with a margin of safety.

The Project air quality impact assessment also concluded that the maximum predicted air toxics air quality impacts resulting from Facility operation will not cause an exceedance of a RIDEM Acceptable Ambient Level ("AAL") at any location at or beyond the property line of the Facility. The AALs have been established by RIDEM through health studies to be protective of human health, with a margin of safety. Invenergy has also submitted a Project Health Risk Assessment to RIDEM which demonstrates that all of the applicable health risk standards established by RIDEM to protect the local residents will be met during

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Facility operation.

As described in Section 6.1 of the EFSB application, and with the completion of each of the assessments required by RIDEM for a Major Source Permit Application, Invenergy has demonstrated that the Project's air quality impacts at all locations at or beyond the property line will comply with all applicable health based air quality standards during Facility operation.

RESPONDENT: John Niland, Director, Business Development, Invenergy
Michael Feinblatt, ESS Group, Inc.

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1.19: Please explain how Invenergy plans to deal with the impact of diminished property values in the neighborhood.

RESPONSE: Invenergy does not believe that there will be any diminishment of property values and in order to stand behind that statement, Invenergy is prepared to offer abutters a Property Value Protection Agreement that will provide protection against diminished value, if it were to occur.

RESPONDENT: John Niland, Director, Business Development, Invenergy

DATE: March 31, 2016