TABLE 4.5-10: 2015 ESTIMATED COMMUNITY NOISE EQUIVALENT LEVEL /a/

Roadway Segment	Estimated dBA, CNEL /b/		
	No Project (2015)	Project (2015)	Project Impact
Floral Drive between Bleakwood Avenue and Collegian Avenue	68.3	68.6	0.3
Brightwood Street, eastbound from Atlantic Boulevard	61.7	61.7	0.0
Floral Drive between Mednik Avenue to Bleakwood Avenue	67.9	68.3	0.4
Floral Drive between Ford Boulevard to Mednik Avenue	67.5	67.9	0.4
Mednik Avenue, southbound from Floral Drive	67.3	67.3	0.0
Bleakwood Avenue between Floral Drive and Avenida Cesar Chavez	64.1	65.1	1.0
Avenida Cesar Chavez between Bleakwood Avenue and Collegian Avenue	66.8	67.1	0.3
Collegian Avenue between Avenida Cesar Chavez and Floral Drive	65.8	66.2	0.4

/a/ The predicted CNEL were calculated as peak hour L_{eq} and converted into CNEL using the California Department of Transportation *Technical Noise Supplement* (October 1998). The conversion involved making a correction for peak hour traffic volumes as a percentage of average daily traffic and a nighttime penalty correction.
SOURCE: TAHA, 2010.

Mechanical Equipment Noise. No changes are proposed to the existing central plant. A new central plant facility would be constructed on the north side of the campus, approximately 65 feet from single- and multi-family residences north of the project site. The central plant facility would include equipment outside and equipment within a cinder block structure. Noise generating equipment outside would include three cooling towers and eight microturbines. Equipment within the cinder block building would include chillers, boilers, pumps, a fan coil unit, heat exchangers, air separators, expansion tanks, and variable frequency drives.

Noise generated by the equipment within the cinder block structure would be inaudible. However, equipment outside the structure would generate audible noise levels. The three cooling towers would generate a composite noise level of 77.8 dBA at 50 feet.[9] The eight microturbines would generate a composite noise level of 70.4 dBA at 50 feet.[10] The total composite noise level generated by the central plant would be 78.5 dBA at 50 feet. This could (without mitigation) cause the daytime ambient noise level at nearby sensitive receptors to increase by 13.0 dBA over the existing daytime ambient noise level of 63.4 dBA L_{eq}. The nighttime ambient noise level at nearby sensitive receptors could increase by 22.0 dBA over the existing nighttime ambient noise level of 54.2 dBA. Operation of the central plant facility could exceed the 5-dBA significance threshold, and would result in a significant noise impact without mitigation.

Athletic Field Noise. The existing ELAC campus conditions include a baseball field in the southwestern portion of the campus near to the Child Development Center, Weingart Stadium along Floral Drive, and the Women's Softball Field also along Floral Drive. These uses would not change under the proposed project. The proposed project would include several outdoor recreation areas. The proposed tennis courts, football and soccer fields would be built in the southwestern portion of the campus near to the Child Development Center. The proposed Women's Athletic Field would be sited near the northern boundary of the project site, adjacent and the east of the existing Women's Softball Field. The proposed tennis courts, football and soccer fields would include light poles for nighttime games and practice. These recreational land uses would not include public address systems or bleachers for crowds. It is anticpaited that nighttime fields would operate until 10:00 p.m.

[9]B.A.C. Cooling Tower Selection Program Memorandum, September 22, 2009.
[10]Capstone Turbine Corporation, C65 & C65-ICHP MicroTurbine brochure, copyright date 2008.