

**DOCKETED**

|                         |                                  |
|-------------------------|----------------------------------|
| <b>Docket Number:</b>   | 25-OPT-02                        |
| <b>Project Title:</b>   | Prairie Song Reliability Project |
| <b>TN #:</b>            | 264397                           |
| <b>Document Title:</b>  | App 3-7 A-D Noise Appendices     |
| <b>Description:</b>     | N/A                              |
| <b>Filer:</b>           | Erin Phillips                    |
| <b>Organization:</b>    | Dudek                            |
| <b>Submitter Role:</b>  | Applicant Consultant             |
| <b>Submission Date:</b> | 6/20/2025 1:39:35 PM             |
| <b>Docketed Date:</b>   | 6/20/2025                        |

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## **Section 3.7**

Noise

Appendices

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## **Appendix 3.7A**

### Baseline Sound Measurement Field Data

## Field Noise Measurement Data

Record: 1998

|              |                   |
|--------------|-------------------|
| Project Name | Prairie Song BESS |
| Observer(s)  |                   |
| Date         | 2024-10-25        |

### Meteorological Conditions

|                   |               |
|-------------------|---------------|
| Temp (F)          | 81            |
| Humidity % (R.H.) | 13            |
| Wind              | Moderate      |
| Wind Speed (MPH)  | 14            |
| Wind Direction    | North East    |
| Sky               | Partly Cloudy |

### Instrument and Calibrator Information

|                            |                  |
|----------------------------|------------------|
| Instrument Name List       | (ENC) Rion NL-52 |
| Instrument Name            | (ENC) Rion NL-52 |
| Instrument Name Lookup Key | (ENC) Rion NL-52 |
| Manufacturer               | Rion             |
| Model                      | NL-52            |
| Serial Number              | 553896           |
| Calibrator Name            | (ENC) LD CAL150  |



|                            |                 |
|----------------------------|-----------------|
| Calibrator Name            | (ENC) LD CAL150 |
| Calibrator Name Lookup Key | (ENC) LD CAL150 |
| Calibrator Manufacturer    | Larson Davis    |
| Calibrator Model           | LD CAL150       |
| Calibrator Serial #        | 5152            |
| Pre-Test (dBA SPL)         | 94              |
| Post-Test (dBA SPL)        | 94              |
| Windscreen                 | Yes             |
| Weighting?                 | A-WTD           |
| Slow/Fast?                 | Slow            |

| Monitoring             |                        |
|------------------------|------------------------|
| Record #               | 1                      |
| Site ID                | ST1                    |
| Site Location Lat/Long | 34.485516, -118.140669 |
| Begin (Time)           | 12:11:00               |
| End (Time)             | 12:26:00               |
| Leq                    | 64.8                   |
| Lmax                   | 83.2                   |
| Lmin                   | 44.6                   |
| Other Lx?              | L90, L50, L10          |
| L90                    | 47.3                   |
| L50                    | 50.5                   |

|                                                                       |                                  |
|-----------------------------------------------------------------------|----------------------------------|
| L10                                                                   | 63                               |
| Other Lx (Specify Metric)                                             | L                                |
| Primary Noise Source                                                  |                                  |
| Other Noise Sources (Background)                                      | Distant Traffic, Rustling Leaves |
| Is the same instrument and calibrator being used as previously noted? | Yes                              |
| Are the meteorological conditions the same as previously noted?       | Yes                              |

### Description / Photos

### Site Photos

#### Photo



#### Comments / Description

Facing southwest

## Site Photos

Photo



Comments / Description

*Facing northeast*

## Monitoring

|                        |                        |
|------------------------|------------------------|
| Record #               | 2                      |
| Site ID                | ST3                    |
| Site Location Lat/Long | 34.490627, -118.139607 |
| Begin (Time)           | 11:29:00               |
| End (Time)             | 11:44:00               |
| Leq                    | 49.2                   |
| Lmax                   | 60.6                   |
| Lmin                   | 43.1                   |
| Other Lx?              | L90, L50, L10          |
| L90                    | 45.8                   |

|                                                                       |                        |
|-----------------------------------------------------------------------|------------------------|
| L50                                                                   | 48.2                   |
| L10                                                                   | 50.8                   |
| Other Lx (Specify Metric)                                             | L                      |
| Primary Noise Source                                                  | Traffic                |
| Other Noise Sources (Background)                                      | Birds, Distant Traffic |
| Is the same instrument and calibrator being used as previously noted? | Yes                    |
| Are the meteorological conditions the same as previously noted?       | Yes                    |

### Description / Photos

### Site Photos

Photo



Comments / Description

Facing northeast



## Site Photos

Photo



Comments / Description

*Facing south*

## Site Photos

Photo



Comments / Description

*Facing north*

| Monitoring                                                            |                                         |
|-----------------------------------------------------------------------|-----------------------------------------|
| Record #                                                              | 3                                       |
| Site ID                                                               | ST2                                     |
| Site Location Lat/Long                                                | 34.481216, -118.166956                  |
| Begin (Time)                                                          | 11:52:00                                |
| End (Time)                                                            | 12:07:00                                |
| Leq                                                                   | 66                                      |
| Lmax                                                                  | 90.4                                    |
| Lmin                                                                  | 43.7                                    |
| Other Lx?                                                             | L90, L50, L10                           |
| L90                                                                   | 45.2                                    |
| L50                                                                   | 48.6                                    |
| L10                                                                   | 65.5                                    |
| Other Lx (Specify Metric)                                             | L                                       |
| Primary Noise Source                                                  | Traffic                                 |
| Other Noise Sources (Background)                                      | Birds, Distant Traffic, Rustling Leaves |
| Is the same instrument and calibrator being used as previously noted? | Yes                                     |
| Are the meteorological conditions the same as previously noted?       | Yes                                     |

Description / Photos

### Site Photos

Photo



Comments / Description

*Facing north*

### Site Photos

Photo

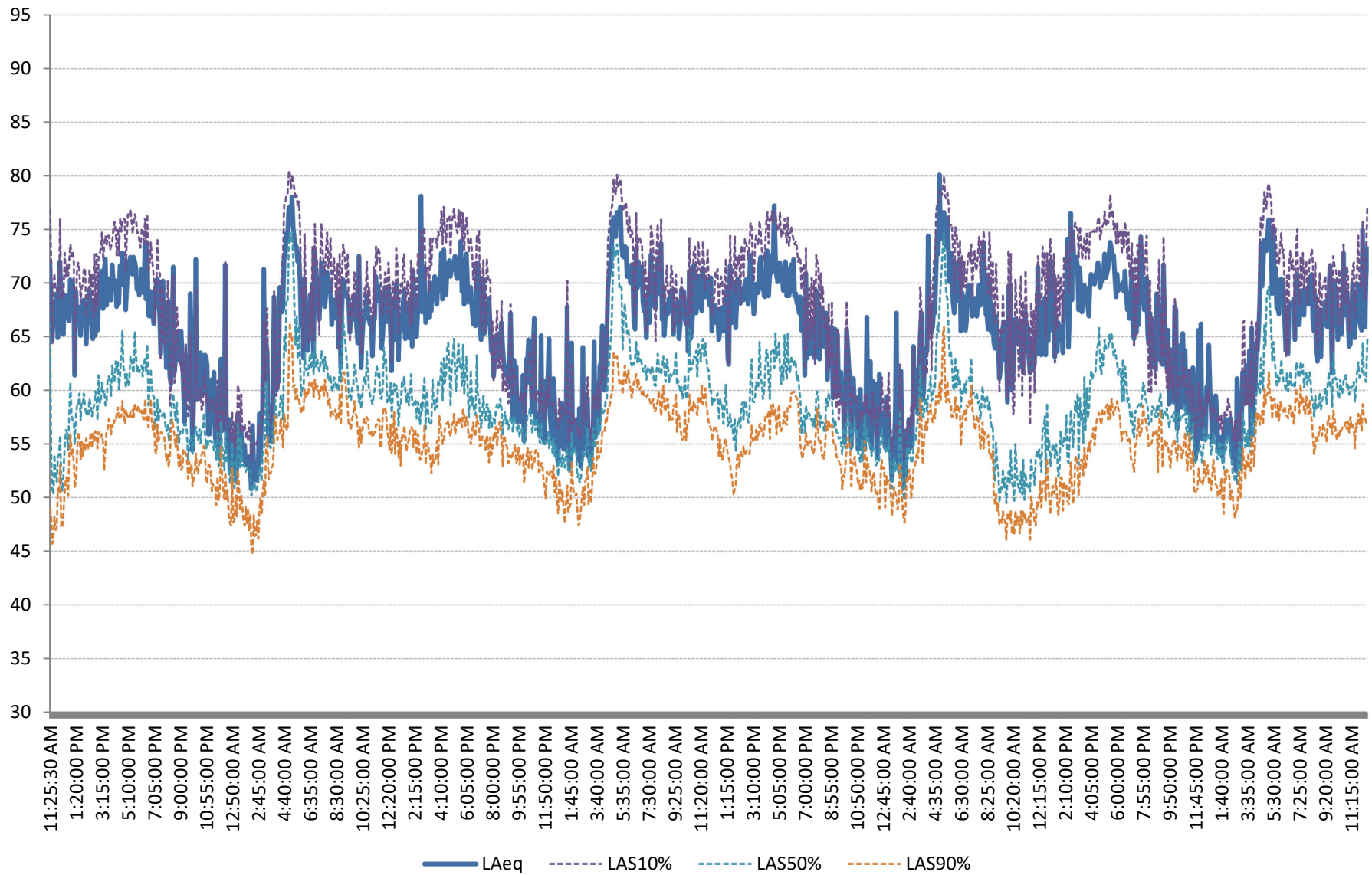




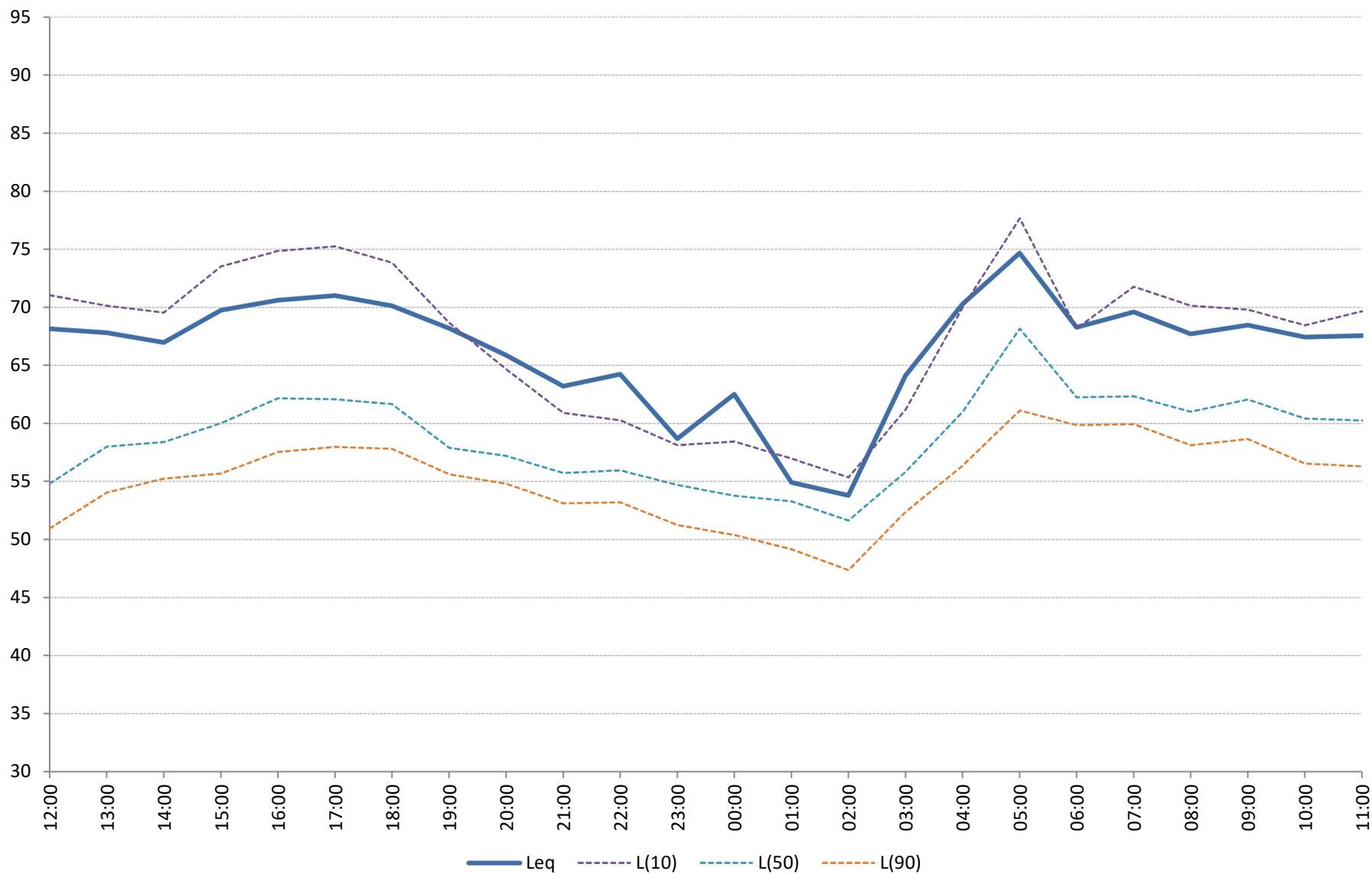




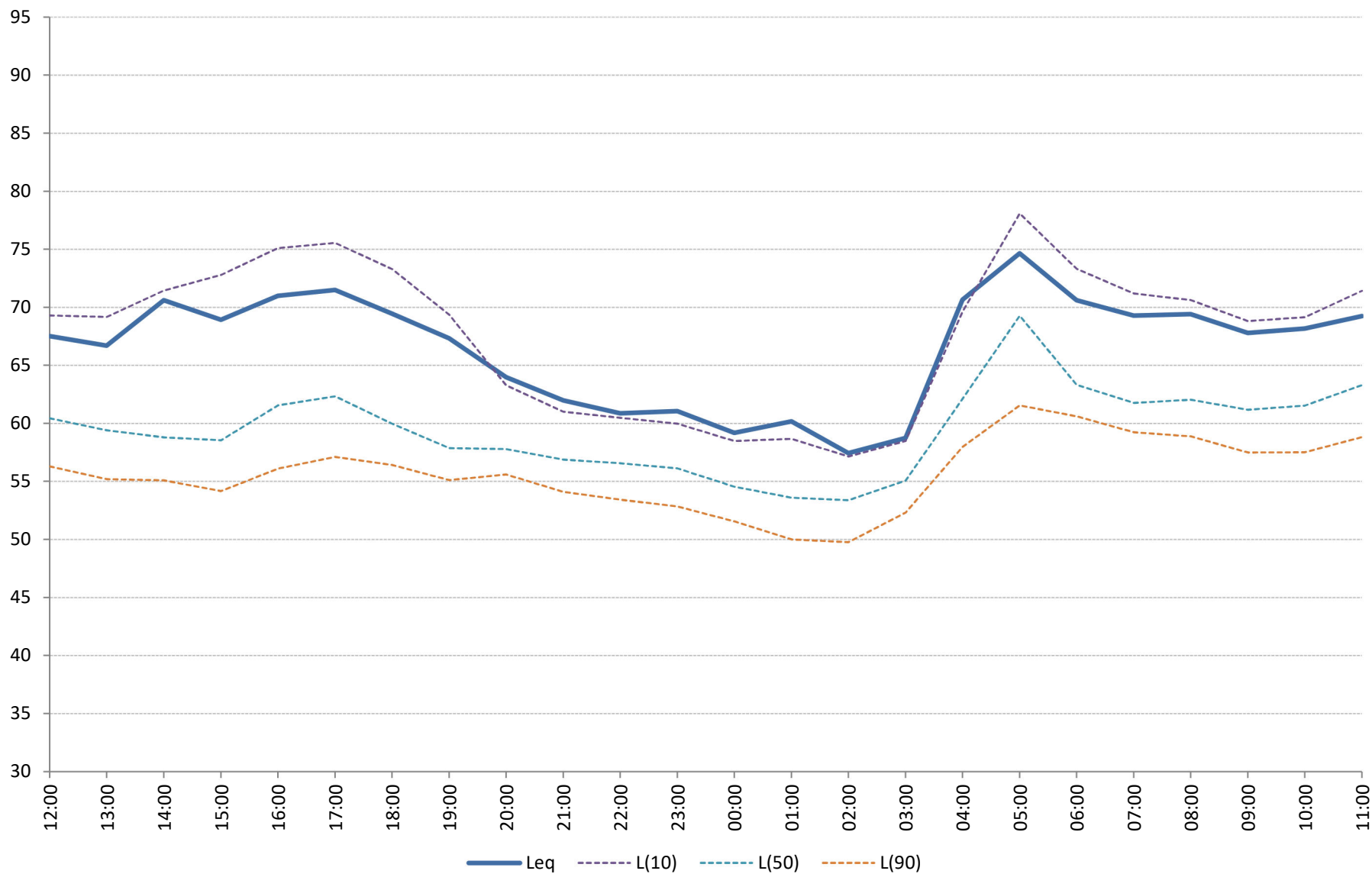
**LT1 - Five-Minute Interval Sound Levels from 11:25 a.m. PST 10/21/24  
through 11:30 a.m. 10/25/24**



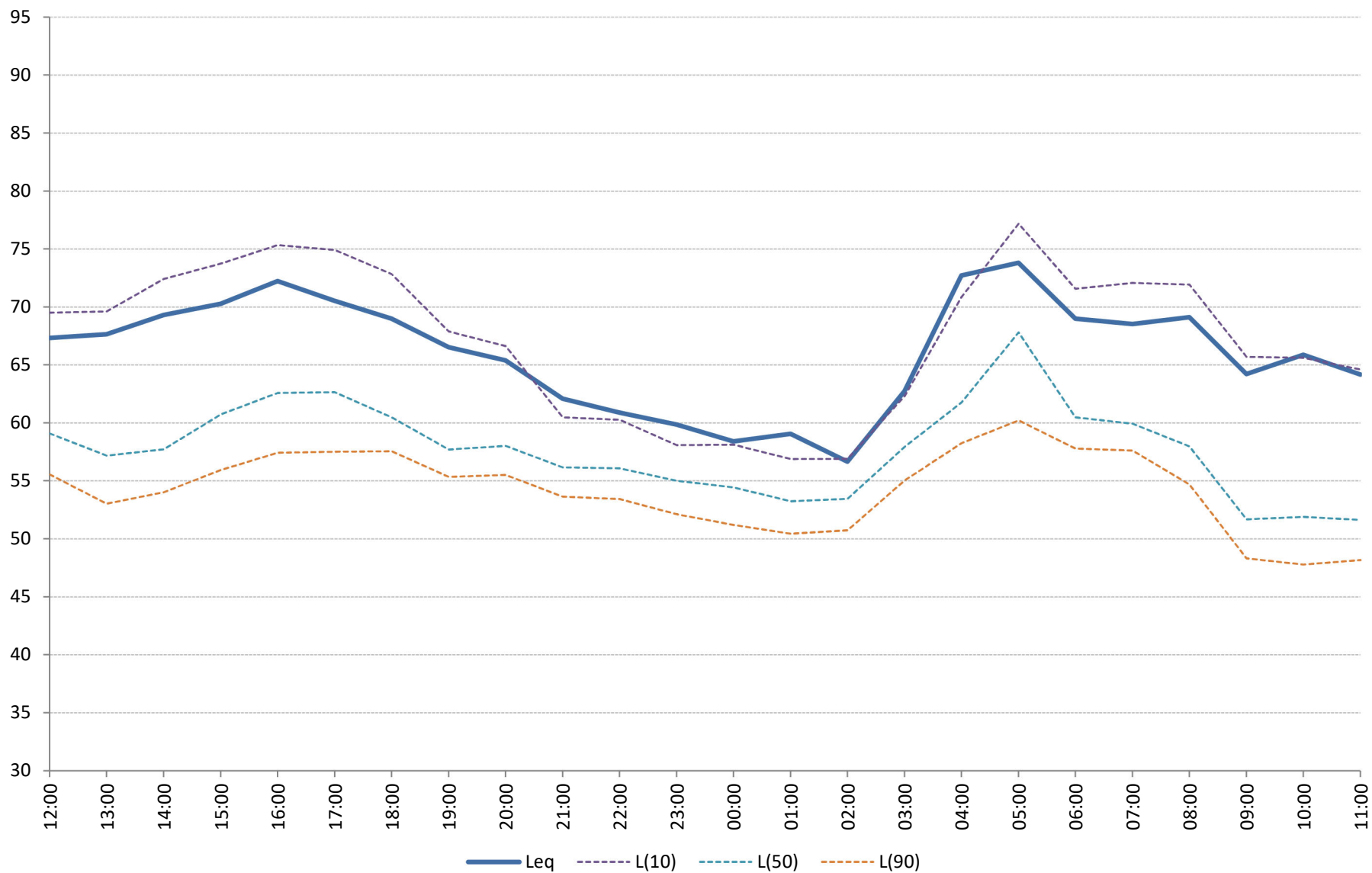
**LT1** - Hourly Sound Levels from 12:00 p.m. PST 10/21/24 through 11:00  
a.m. 10/22/24



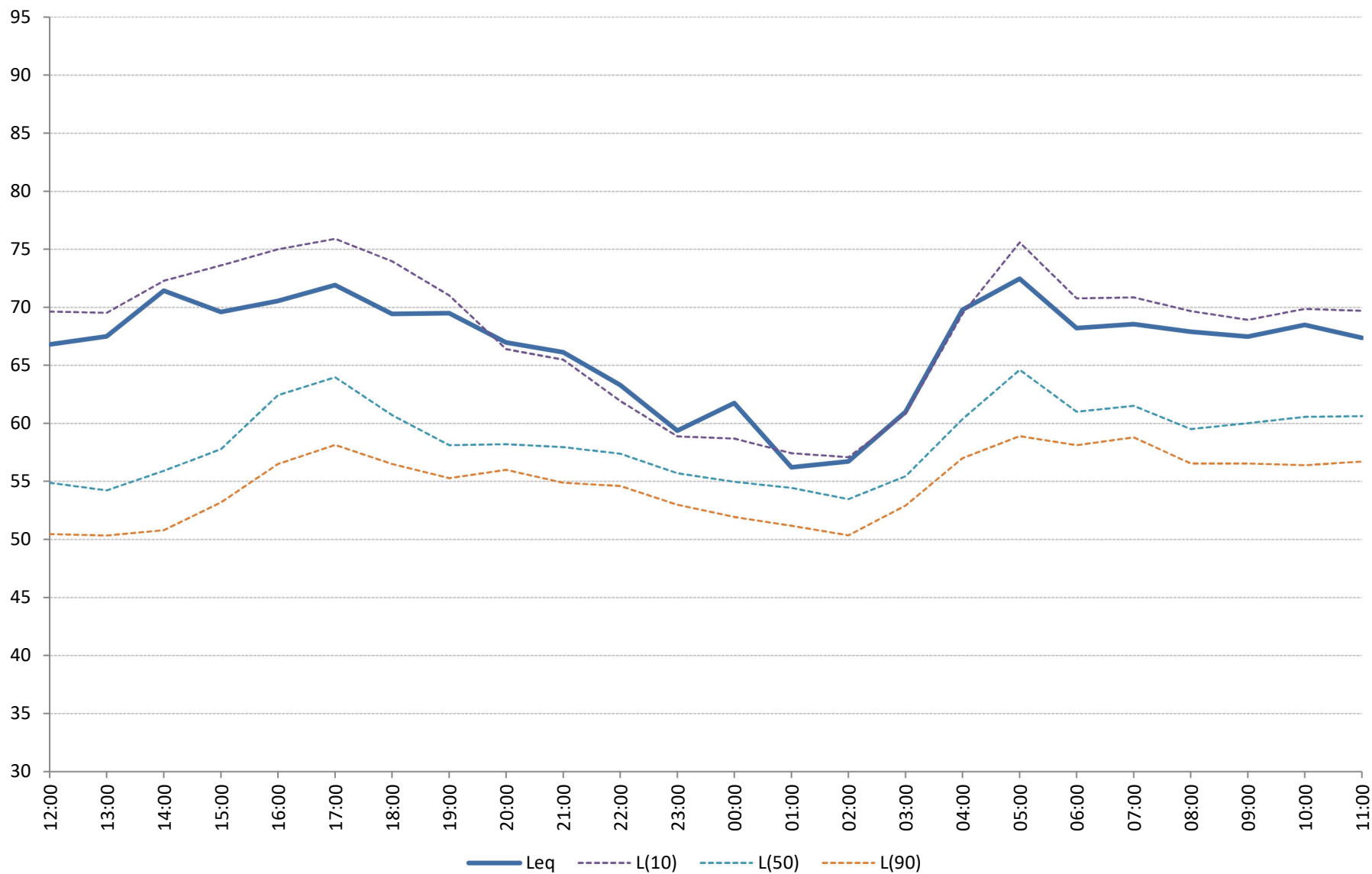
# LT1 - Hourly Sound Levels from 12:00 p.m. PST 10/22/24 through 11:00 a.m. 10/23/24



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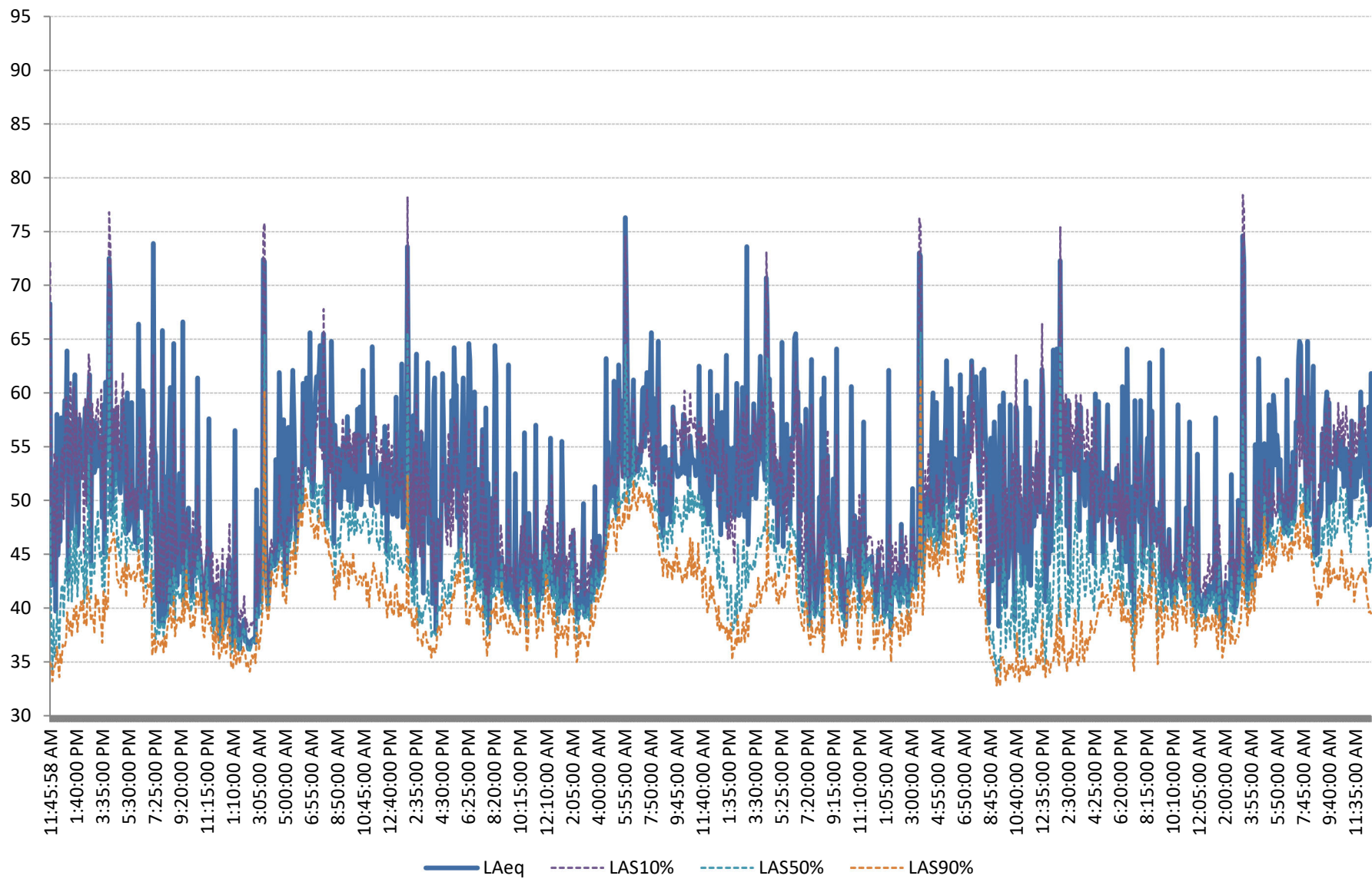


# LT1 - Hourly Sound Levels from 12:00 p.m. PST 10/24/24 through 11:00 a.m. 10/25/24

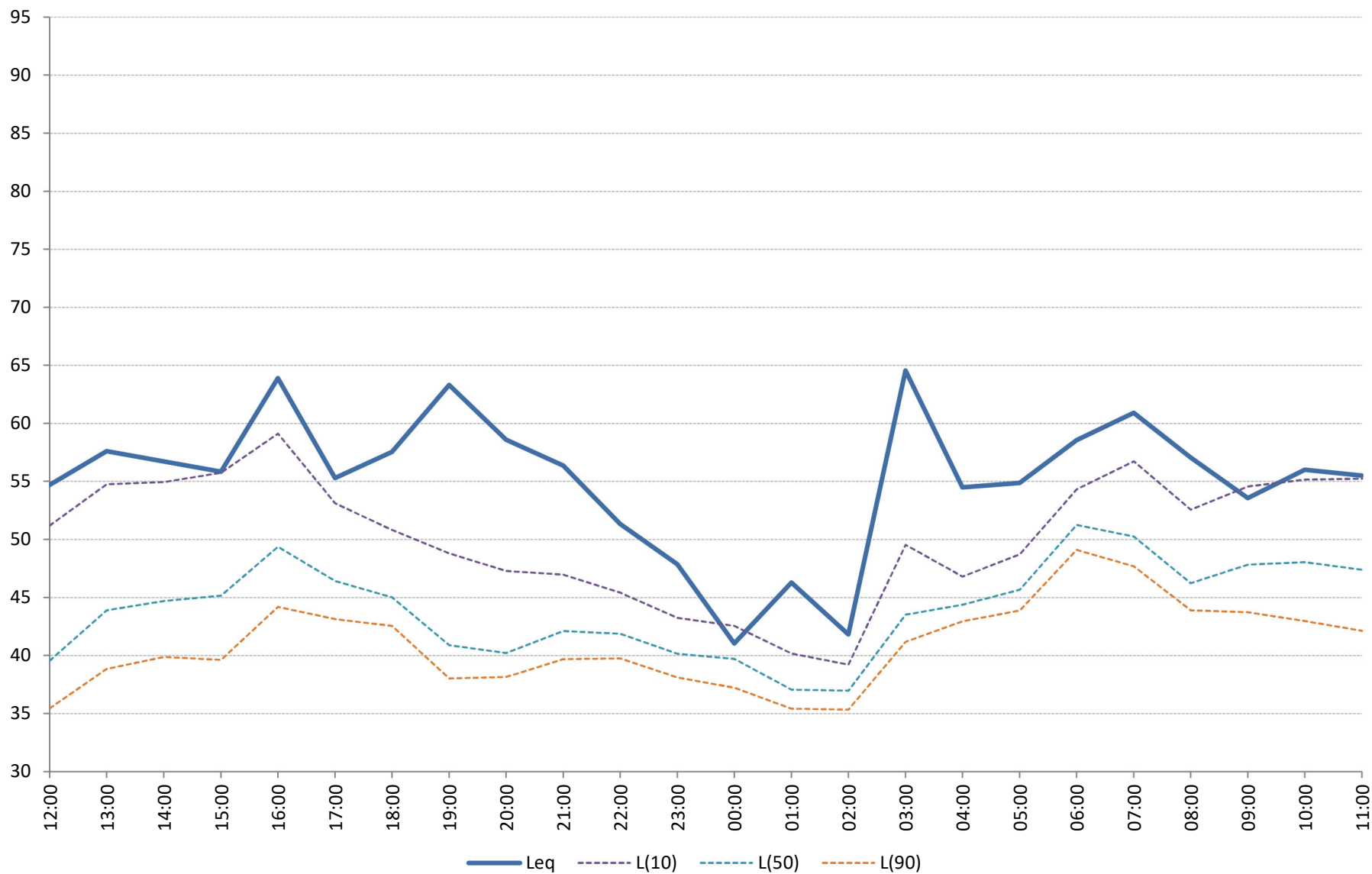




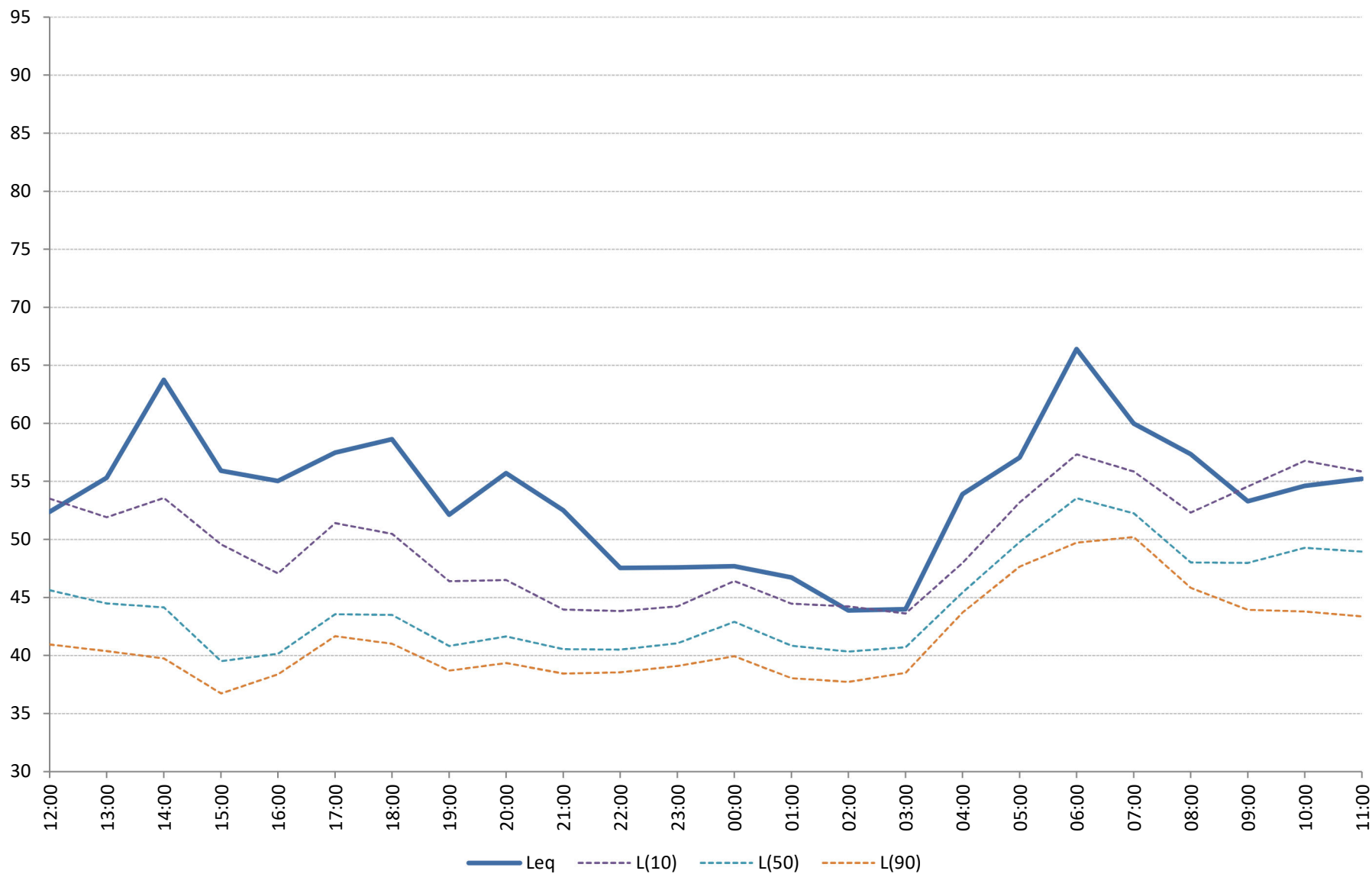
# LT2 - Five-Minute Interval Sound Levels from 11:25 a.m. PST 10/21/24 through 11:30 a.m. 10/25/24



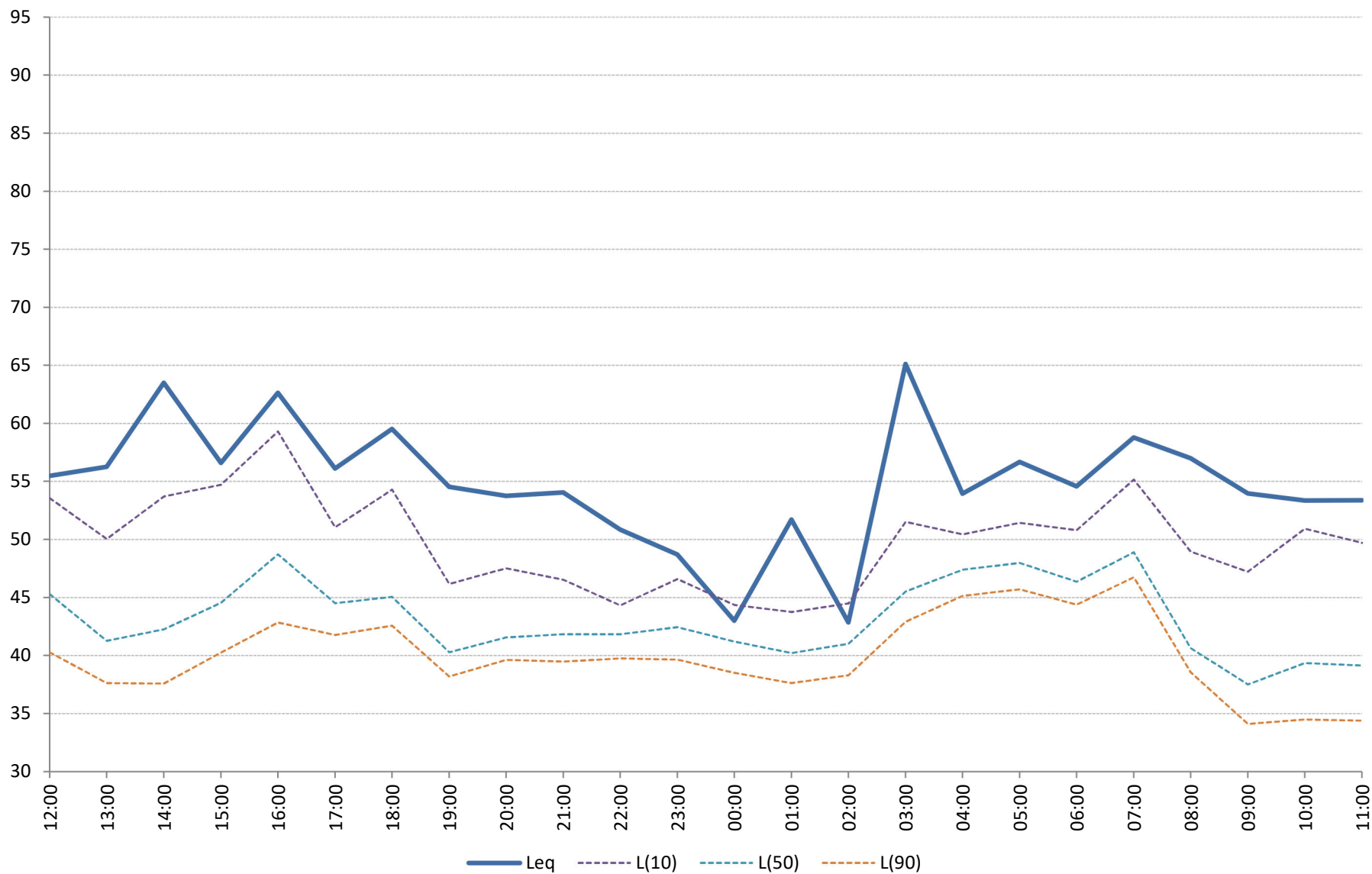
# LT2 - Hourly Sound Levels from 12:00 p.m. PST 10/21/24 through 11:00 a.m. 10/22/24



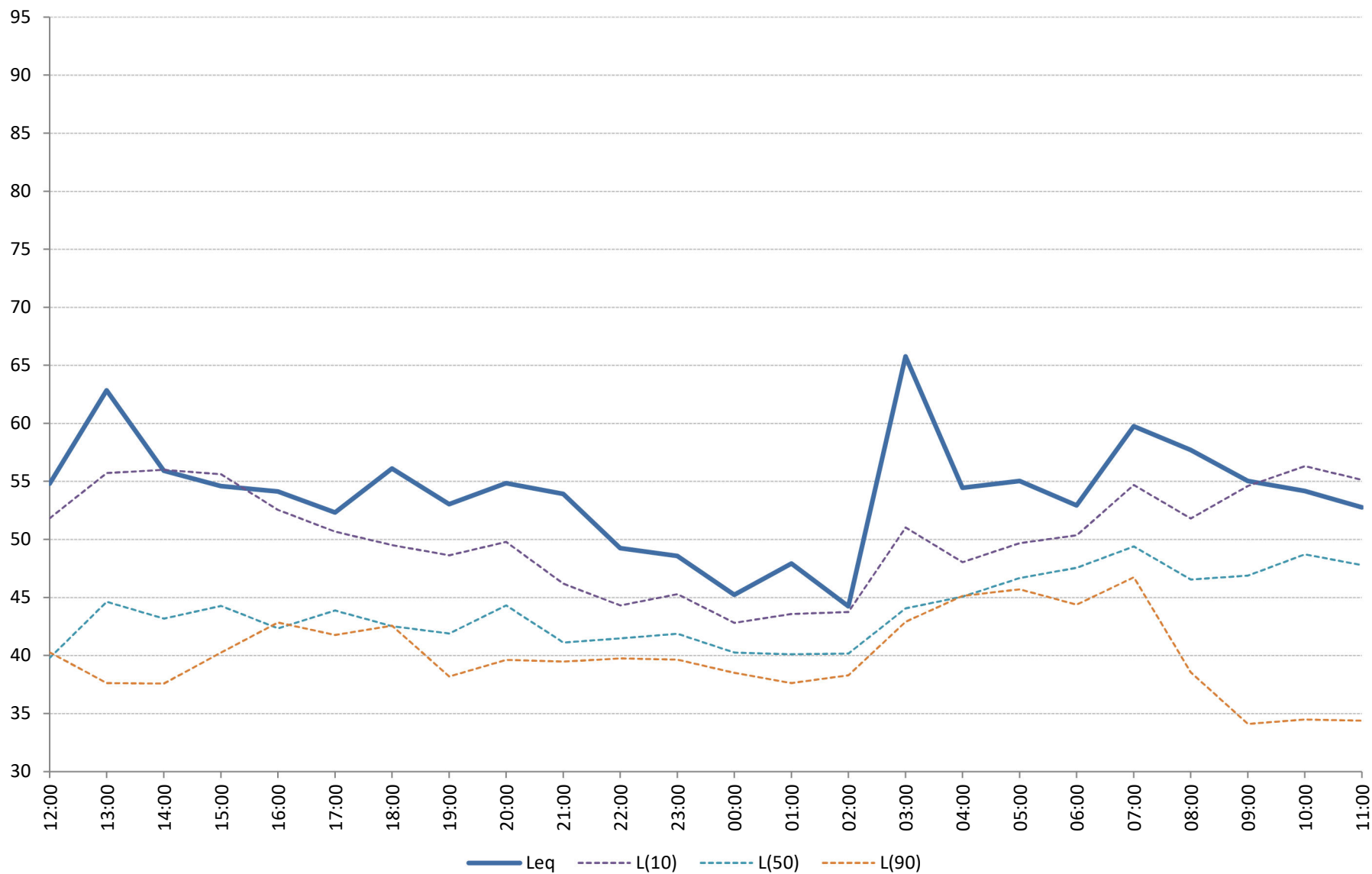
# LT2 - Hourly Sound Levels from 12:00 p.m. PST 10/22/24 through 11:00 a.m. 10/23/24



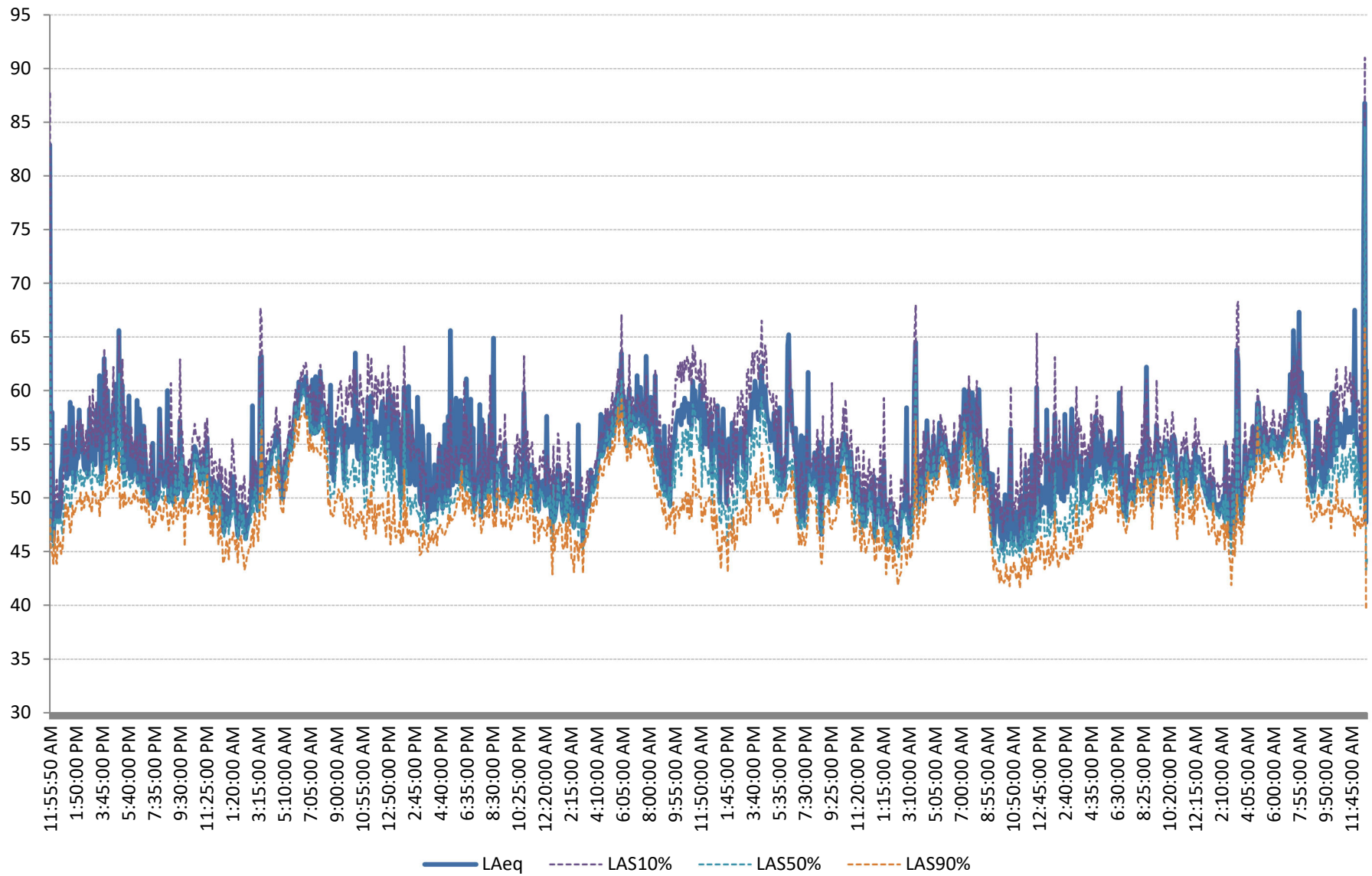
# LT2 - Hourly Sound Levels from 12:00 p.m. PST 10/23/24 through 11:00 a.m. 10/24/24



# LT2 - Hourly Sound Levels from 12:00 p.m. PST 10/24/24 through 11:00 a.m. 10/25/24

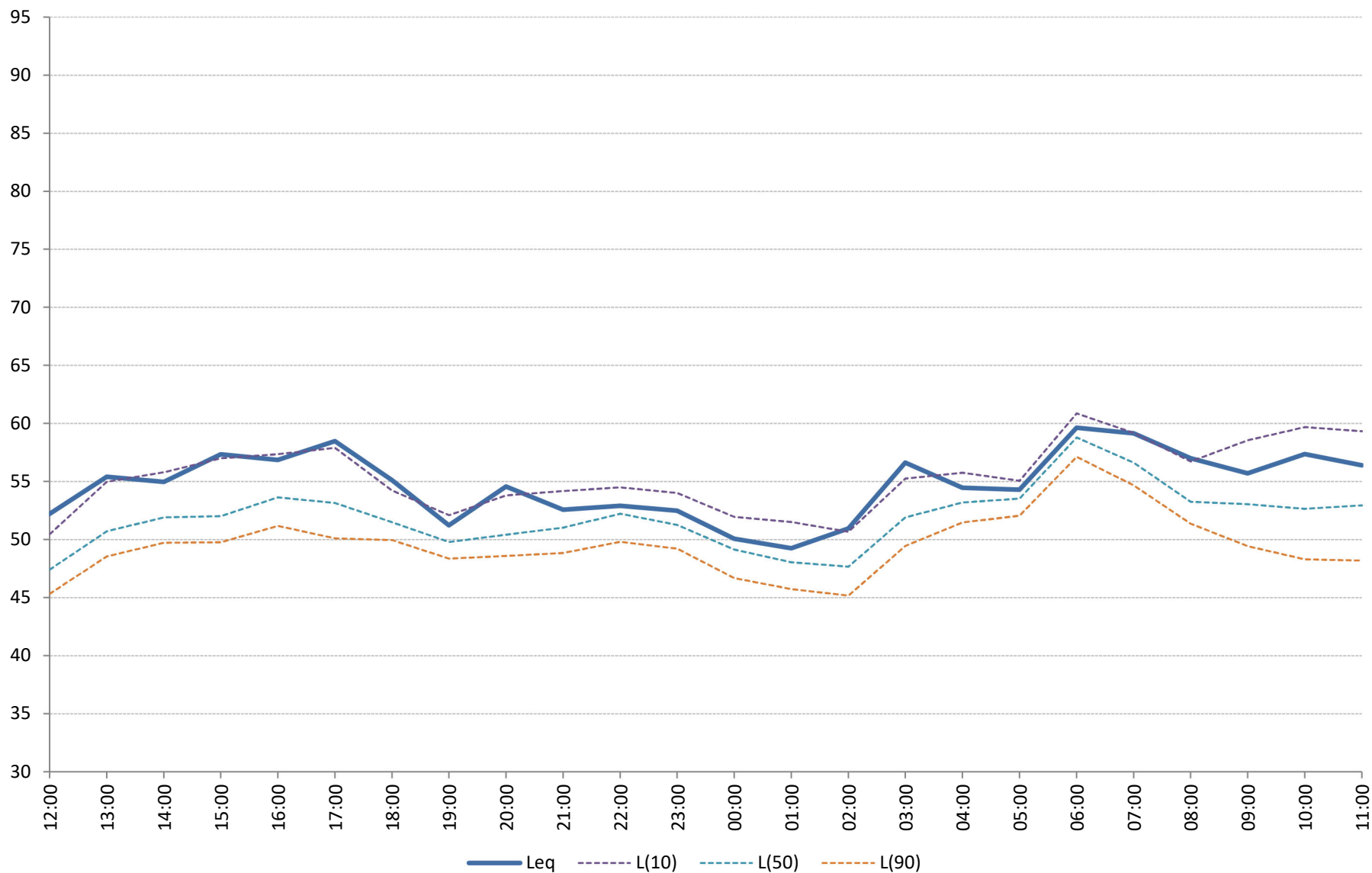


# LT3 - Five-Minute Interval Sound Levels from 11:25 a.m. PST 10/21/24 through 11:30 a.m. 10/25/24

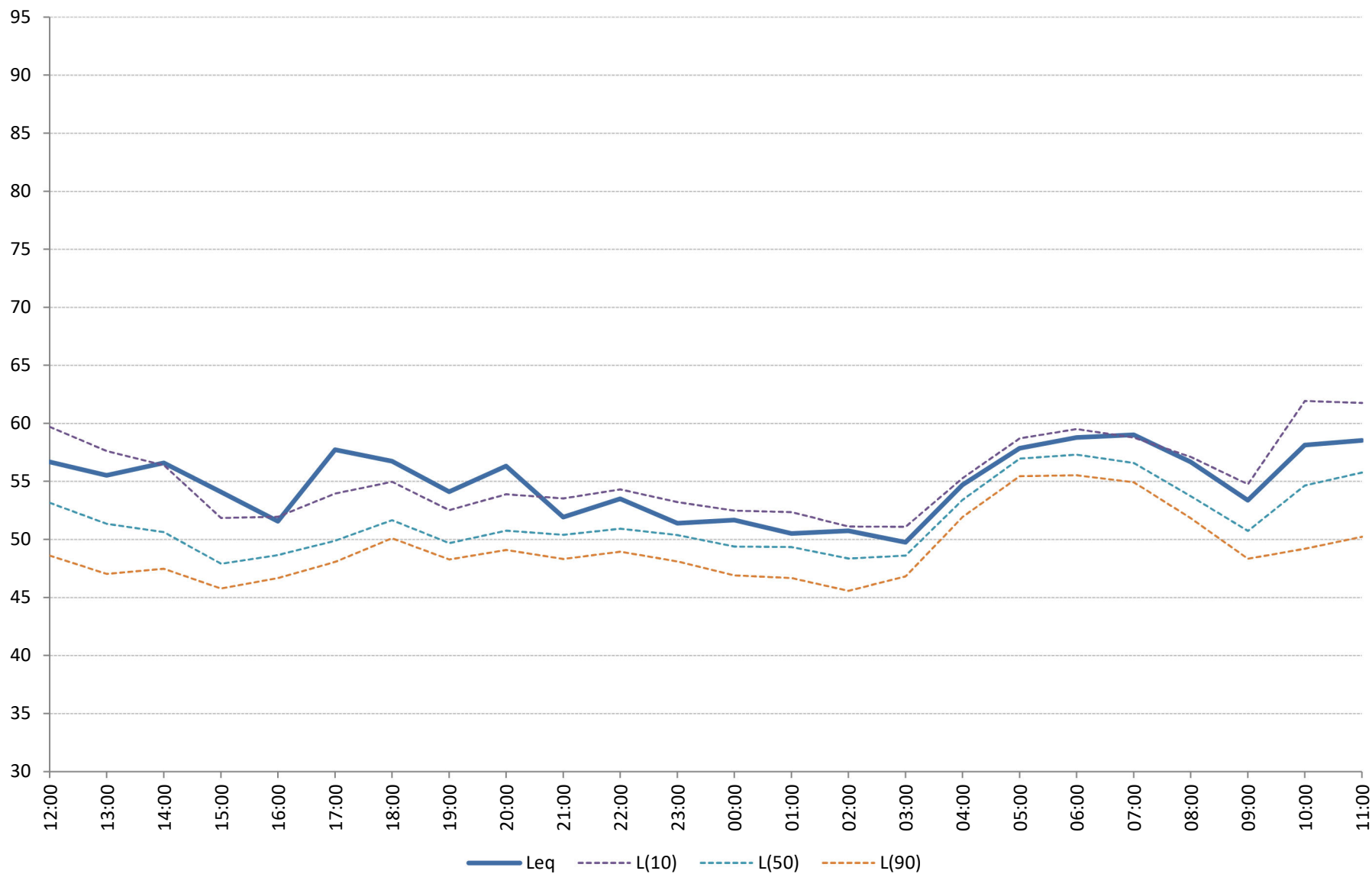




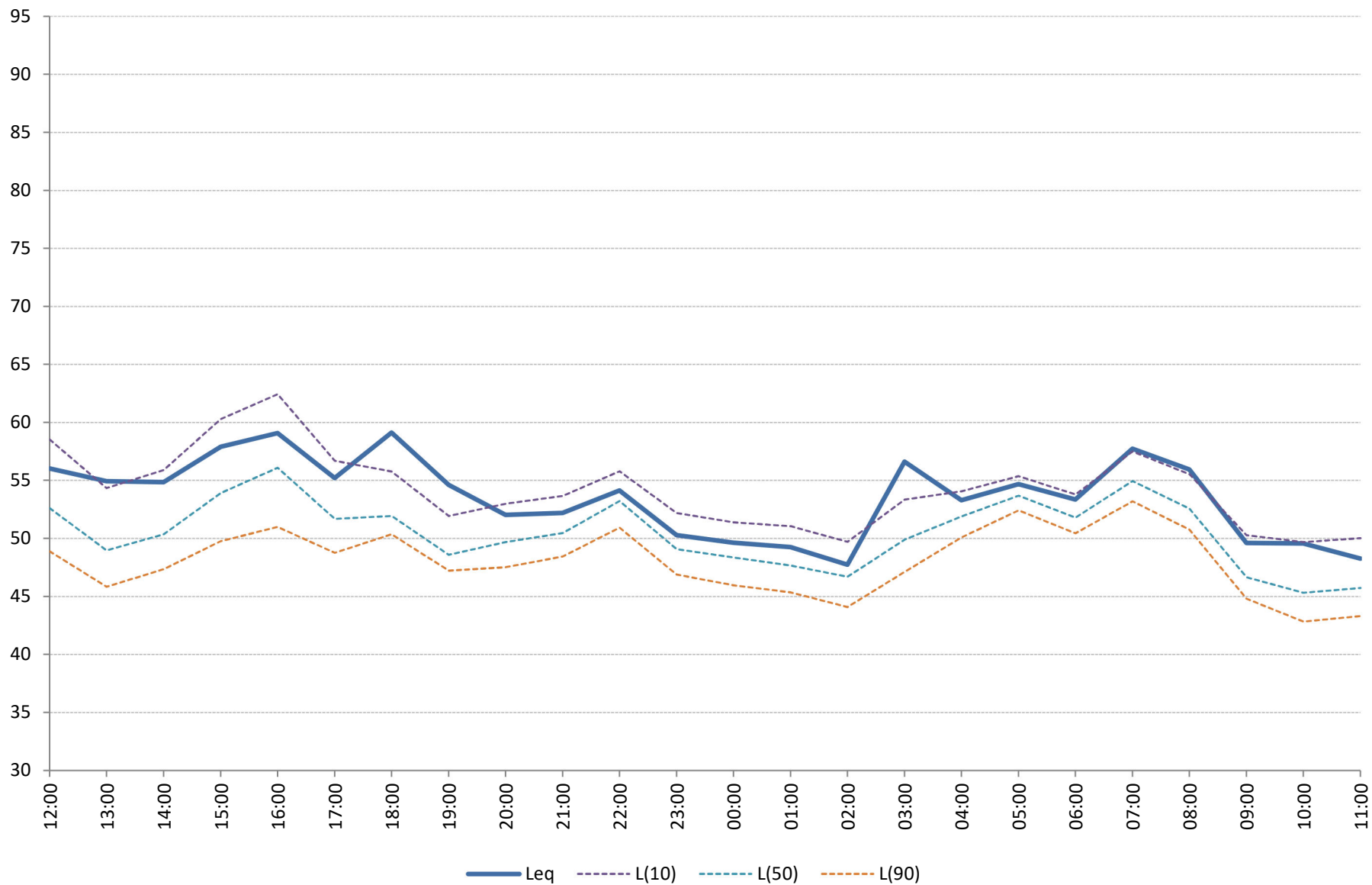
# LT3 - Hourly Sound Levels from 12:00 p.m. PST 10/21/24 through 11:00 a.m. 10/22/24



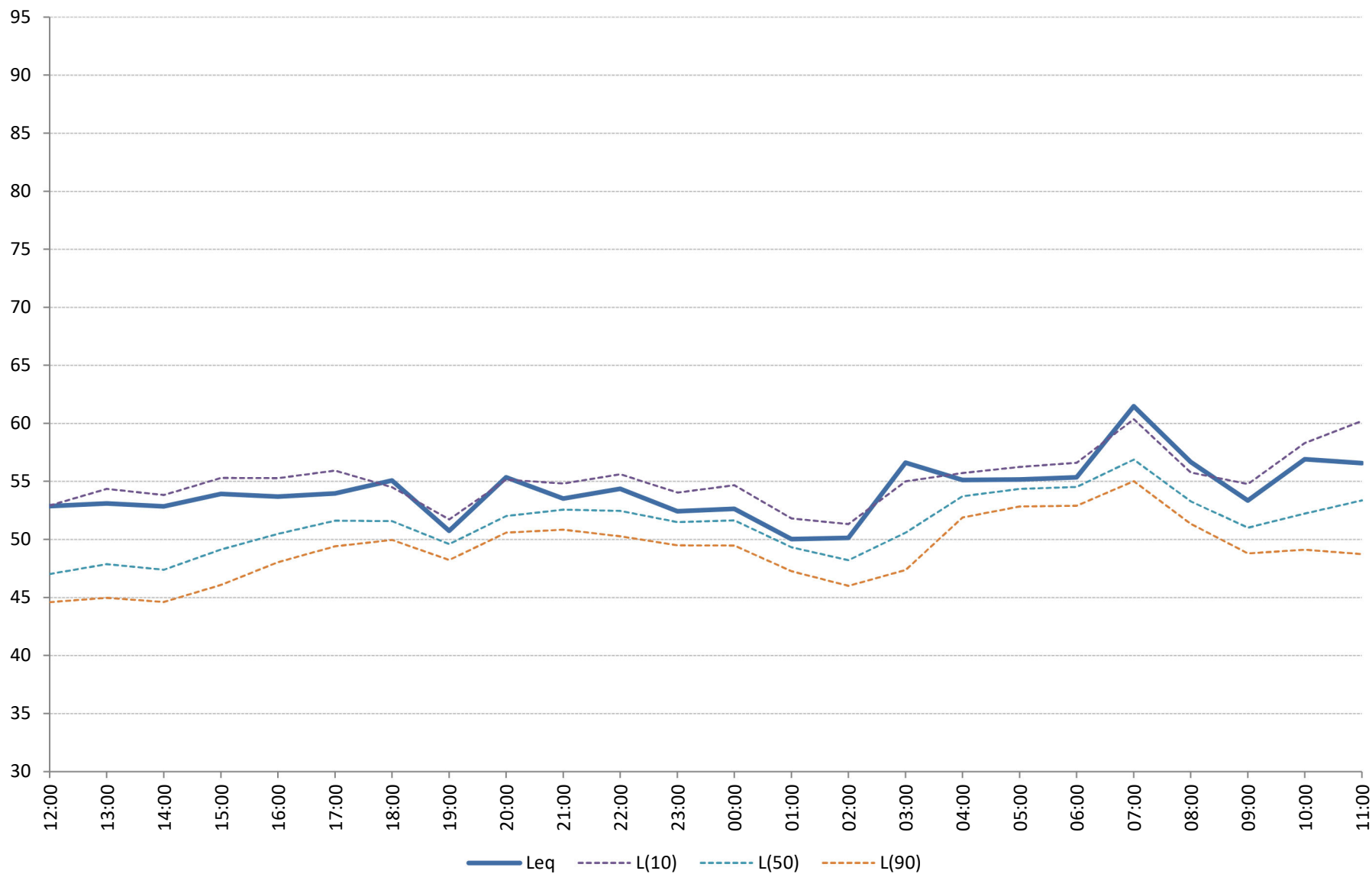
# LT3 - Hourly Sound Levels from 12:00 p.m. PST 10/22/24 through 11:00 a.m. 10/23/24



# LT3 - Hourly Sound Levels from 12:00 p.m. PST 10/23/24 through 11:00 a.m. 10/24/24



# LT3 - Hourly Sound Levels from 12:00 p.m. PST 10/24/24 through 11:00 a.m. 10/25/24



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## **Appendix 3.7B**

### Roadway Construction Noise Model Inputs and Outputs

| Receiver to barrier distance          |                                   | 5000                |                                                 | noise level limit for construction phase at residential land use, per County guidance = |                              |                                       |                            |                       |                                  |                                    |                      |                                                        |                                                | 75                  |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
|---------------------------------------|-----------------------------------|---------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------|---------------------------------------|----------------------------|-----------------------|----------------------------------|------------------------------------|----------------------|--------------------------------------------------------|------------------------------------------------|---------------------|-----------------------------------|----------------------------------|-----------------------------------|----------|----------|----------|----------------------------|------------|---------------------|---------------------|------------------|---------------------|-------------|--|--|--|--|
| Receiver to barrier distance          |                                   | 170                 |                                                 | allowable hours over which Leq is to be averaged =                                      |                              |                                       |                            |                       |                                  |                                    |                      |                                                        |                                                | 1                   |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
| Receiver height                       |                                   | 5                   |                                                 | 12 = temporary barrier (TB) of input height inserted between source and receptor        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
| Construction Activity                 | Equipment                         | Total Equipment Qty | Reference Level @ 50 ft. from FHWA RCNM 2 Table | Client Equipment Description, Data Source and/or Notes                                  | Source to NSR Distance (ft.) | Temporary Barrier Insertion Loss (dB) | Additional Noise Reduction | Distance-Adjusted Leq | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 1-hour Leq | Source Elevation (ft)                                  | Receiver Elevation (ft)                        | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | ILBarr (dB) |  |  |  |  |
| Decomission                           | Concrete Saw                      | 0                   | 85.4                                            | Concrete/Industrial Saws                                                                | 100                          | 0.1                                   |                            | 76.4                  | 1                                | 60                                 | 0                    | 2.2                                                    | 5                                              | 0                   | 5                                 | 170                              | 175                               | 5.5      | 170.1    | 175.0    | 0.00                       | 0.1        | 3.6                 | 3.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Crane                             | 1                   | 74.2                                            | Cranes                                                                                  | 100                          | 13.8                                  |                            | 52.8                  | 1                                | 60                                 | 53                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Dozer                             | 1                   | 80.0                                            | Rubber Tired Dozers                                                                     | 100                          | 13.8                                  |                            | 58.0                  | 1                                | 60                                 | 58                   | 5.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.4      | 170.1    | 175.0    | 3.50                       | 15.0       | 17.2                | 5.2                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 100                          | 13.9                                  |                            | 53.6                  | 1                                | 60                                 | 54                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | 1                                                      |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 60.2                |             |  |  |  |  |
| Demolition                            | Dozer                             | 1                   | 80.0                                            | Rubber Tired Dozers                                                                     | 350                          | 0.1                                   |                            | 58.4                  | 8                                | 480                                | 67                   | 5.3                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.3      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.2                 | 5.2                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Concrete Saw                      | 0                   | 85.4                                            | Concrete/Industrial Saws                                                                | 350                          | 0.1                                   |                            | 63.7                  | 8                                | 480                                | 0                    | 2.2                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 5.5      | 170.1    | 175.0    | 0.00                       | 0.1        | 3.6                 | 3.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 350                          | 0.1                                   |                            | 54.2                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.8                 | 4.8                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Decomission Phase:                   |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 68.9        |  |  |  |  |
| Site Prep                             | Front End Loader (Cydical)        | 1                   | 72.4                                            | Tractors/Loaders/Backhoes                                                               | 100                          | 8.4                                   |                            | 56.0                  | 8                                | 480                                | 65                   | 6.0                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.4      | 170.0    | 175.0    | 0.41                       | 9.2        | 13.5                | 5.5                 | 0.5              | 0.7                 | 8.4         |  |  |  |  |
|                                       | Excavator                         | 1                   | 75.9                                            | Excavators                                                                              | 100                          | 7.6                                   |                            | 60.4                  | 8                                | 480                                | 69                   | 6.2                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.3      | 170.0    | 175.0    | 0.34                       | 8.4        | 13.6                | 5.6                 | 0.5              | 0.7                 | 7.6         |  |  |  |  |
|                                       | Dozer                             | 1                   | 80.0                                            | Rubber Tired Dozers                                                                     | 100                          | 10.7                                  |                            | 61.1                  | 8                                | 480                                | 70                   | 5.3                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.7      | 170.0    | 175.0    | 0.71                       | 11.5       | 13.2                | 5.2                 | 0.5              | 0.7                 | 10.7        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Site Prep Phase:                             |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 73.4                |             |  |  |  |  |
| Substation Site Preparation           | Front End Loader (Cydical)        | 1                   | 72.4                                            | Tractors/Loaders/Backhoes                                                               | 1000                         | 0.1                                   |                            | 40.7                  | 8                                | 480                                | 50                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Excavator                         | 1                   | 75.9                                            | Excavators                                                                              | 1000                         | 0.1                                   |                            | 44.2                  | 8                                | 480                                | 53                   | 6.2                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.6                 | 5.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Dozer                             | 1                   | 80.0                                            | Rubber Tired Dozers                                                                     | 1000                         | 0.1                                   |                            | 48.3                  | 8                                | 480                                | 57                   | 5.3                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.3      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.2                 | 5.2                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Substation Site Preparation Phase:           |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 59.2                |             |  |  |  |  |
| Grading                               | Grader (passby)                   | 1                   | 78.5                                            | Graders                                                                                 | 100                          | 8.4                                   |                            | 62.2                  | 8                                | 480                                | 71                   | 6.0                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.4      | 170.0    | 175.0    | 0.41                       | 9.2        | 13.5                | 5.5                 | 0.5              | 0.7                 | 8.4         |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 100                          | 12.8                                  |                            | 54.7                  | 8                                | 480                                | 64                   | 4.5                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.1      | 170.0    | 175.0    | 1.13                       | 13.5       | 12.8                | 4.8                 | 0.5              | 0.7                 | 12.8        |  |  |  |  |
|                                       | Compactor (Roller)                | 1                   | 82.4                                            | Rollers                                                                                 | 100                          | 13.0                                  |                            | 61.0                  | 8                                | 480                                | 70                   | 4.4                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.2      | 170.0    | 175.0    | 1.19                       | 13.7       | 12.7                | 4.7                 | 0.5              | 0.7                 | 13.0        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Grading Phase:                               |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 74.1                |             |  |  |  |  |
| Substation Site Grading               | Grader (passby)                   | 1                   | 78.5                                            | Graders                                                                                 | 1000                         | 0.1                                   |                            | 46.8                  | 8                                | 480                                | 56                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 1000                         | 0.1                                   |                            | 44.1                  | 8                                | 480                                | 53                   | 4.5                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.8                 | 4.8                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Compactor (Roller)                | 1                   | 82.4                                            | Rollers                                                                                 | 1000                         | 0.1                                   |                            | 50.7                  | 8                                | 480                                | 60                   | 4.4                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.7                 | 4.7                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Substation Site Grading Phase:               |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 61.8                |             |  |  |  |  |
| Substation Installation               | Man Lift                          | 1                   | 72.1                                            | Aerial Lifts                                                                            | 1000                         | 9.1                                   |                            | 31.3                  | 8                                | 480                                | 40                   | 5.8                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.5      | 170.0    | 175.0    | 0.49                       | 9.9        | 13.4                | 5.4                 | 0.5              | 0.7                 | 9.1         |  |  |  |  |
|                                       | Compressor                        | 0                   | 65.6                                            | Air Compressors                                                                         | 1000                         | 13.2                                  |                            | 20.8                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.2      | 170.0    | 175.0    | 1.25                       | 13.9       | 12.7                | 4.7                 | 0.5              | 0.7                 | 13.2        |  |  |  |  |
|                                       | Directional Drill Rig             | 1                   | 67.9                                            | Bore/Drill Rigs                                                                         | 1000                         | 13.8                                  |                            | 22.5                  | 8                                | 480                                | 32                   | 4.0                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.4      | 170.0    | 175.0    | 1.43                       | 14.5       | 12.5                | 4.5                 | 0.5              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                   | 72.1                                            | Forklifts                                                                               | 1000                         | 9.1                                   |                            | 31.3                  | 8                                | 480                                | 40                   | 5.8                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.5      | 170.0    | 175.0    | 0.49                       | 9.9        | 13.4                | 5.4                 | 0.5              | 0.7                 | 9.1         |  |  |  |  |
|                                       | Excavator                         | 1                   | 75.9                                            | Trenchers                                                                               | 1000                         | 7.6                                   |                            | 36.6                  | 8                                | 480                                | 46                   | 6.2                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.3      | 170.0    | 175.0    | 0.34                       | 8.4        | 13.6                | 5.6                 | 0.5              | 0.7                 | 7.6         |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Substation Installation Phase:       |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 47.8        |  |  |  |  |
| Gen-Tie Foundation and Tower Erection | Compressor                        | 0                   | 65.6                                            | Air Compressors                                                                         | 100                          | 13.9                                  |                            | 43.3                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                   | 74.2                                            | Cranes                                                                                  | 100                          | 13.8                                  |                            | 52.8                  | 8                                | 480                                | 62                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                   | 72.1                                            | Forklifts                                                                               | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Pump                              | 1                   | 72.8                                            | Pumps                                                                                   | 100                          | 13.9                                  |                            | 50.3                  | 8                                | 480                                | 59                   | 3.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.6      | 170.1    | 175.0    | 4.74                       | 15.0       | 16.4                | 4.4                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Welding Machine                   | 1                   | 71.2                                            | Welders                                                                                 | 100                          | 14.0                                  |                            | 48.3                  | 8                                | 480                                | 57                   | 2.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 10.7     | 170.1    | 175.0    | 5.86                       | 15.0       | 15.8                | 3.8                 | 0.5              | 0.7                 | 14.0        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Gen-Tie Stringing and Pulling Phase: |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 65.8        |  |  |  |  |
| Gen-Tie Stringing and Pulling         | Man Lift                          | 1                   | 72.1                                            | Aerial Lifts                                                                            | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 100                          | 13.9                                  |                            | 53.6                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Gen-Tie Foundation and Tower Erection Phase: |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 64.3                |             |  |  |  |  |
| SCE Upgrades                          | Compressor                        | 0                   | 65.6                                            | Air Compressors                                                                         | 110                          | 13.9                                  |                            | 42.2                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                   | 74.2                                            | Cranes                                                                                  | 110                          | 13.8                                  |                            | 51.6                  | 8                                | 480                                | 61                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Excavator                         | 1                   | 75.9                                            | Excavators                                                                              | 110                          | 13.8                                  |                            | 52.9                  | 8                                | 480                                | 62                   | 6.2                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.7      | 170.1    | 175.0    | 2.80                       | 15.0       | 17.6                | 5.6                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                   | 72.1                                            | Rough Terrain Forklifts                                                                 | 110                          | 13.8                                  |                            | 49.0                  | 8                                | 480                                | 58                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Front End Loader (Passby)         | 0                   | 71.2                                            | Skid Steer Loaders                                                                      | 110                          | 13.8                                  |                            | 48.1                  | 8                                | 480                                | 0                    | 5.4                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.3      | 170.1    | 175.0    | 3.42                       | 15.0       | 17.2                | 5.2                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Front End Loader (Cydical)        | 1                   | 72.4                                            | Tractors/Loaders/Backhoes                                                               | 110                          | 13.8                                  |                            | 49.4                  | 8                                | 480                                | 58                   | 6.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 2.95                       | 15.0       | 17.5                | 5.5                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Excavator                         | 1                   | 75.9                                            | Trenchers                                                                               | 110                          | 13.8                                  |                            | 52.9                  | 8                                | 480                                | 62                   | 6.2                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.7      | 170.1    | 175.0    | 2.80                       | 15.0       | 17.6                | 5.6                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for SCE Upgrades Phase:                  |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 67.5        |  |  |  |  |
| Battery/Container Installation        | Compressor                        | 0                   | 65.6                                            | Air Compressors                                                                         | 100                          | 13.9                                  |                            | 43.3                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                   | 74.2                                            | Cranes                                                                                  | 100                          | 13.8                                  |                            | 52.8                  | 8                                | 480                                | 62                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                   | 72.1                                            | Forklifts                                                                               | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 1                   | 75.8                                            | Tractors/Loaders/Backhoes                                                               | 100                          | 13.9                                  |                            | 53.6                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                     |                                                 |                                                                                         |                              |                                       |                            |                       |                                  |                                    |                      | Total for Battery/Container Installation Phase:        |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 66.2                |             |  |  |  |  |
| Paving                                | Paving ("Cold Mix" Triple Roller) | 1                   | 85.1                                            | Pavers                                                                                  | 110                          | 13.8                                  |                            | 61.8                  | 8                                | 480                                | 71                   | 5.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.6      | 170.1    | 175.0    | 3.75                       | 15.0       | 17.0                | 5.0                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Paving ("Cold Mix")               | 1                   | 73.3                                            | Paving Equipment                                                                        | 110                          | 13.7                                  |                            | 50.9                  | 8                                | 480                                | 60                   | 8.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.4      | 170.1    | 175.0    | 1.52                       | 14.8       | 18.5                | 6.5                 | 0.4              | 0.6                 | 13.7        |  |  |  |  |
|                                       | Compactor (Roller)                | 1                   | 82.4                                            | Rollers                                                                                 | 110                          | 13.9                                  |                            | 59.0                  | 8                                | 480                                | 68                   | 4.4                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.1      | 170.1    | 175.0    | 4.24.                      |            |                     |                     |                  |                     |             |  |  |  |  |



| Receiver to barrier distance          | 5000                              | noise level limit for construction phase at residential land use, per County guidance = |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | 75                                                     |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
|---------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------|------------------------------|---------------------------------------|----------------------------|-----------------------|----------------------------------|------------------------------------|----------------------|--------------------------------------------------------|------------------------------------------------|---------------------|-----------------------------------|----------------------------------|-----------------------------------|----------|----------|----------|----------------------------|------------|---------------------|---------------------|------------------|---------------------|-------------|--|--|--|--|
| Receiver to barrier distance          | 170                               | allowable hours over which Leq is to be averaged =                                      |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | 1                                                      |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
| Receiver height                       | 5                                 | 12 = temporary barrier (TB) of input height inserted between source and receptor        |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     |             |  |  |  |  |
| Construction Activity                 | Equipment                         | Total Equipment Qty                                                                     | Reference Level @ 50 ft. from FHWA RCNM 2 Table | Client Equipment Description, Data Source and/or Notes | Source to NSR Distance (ft.) | Temporary Barrier Insertion Loss (dB) | Additional Noise Reduction | Distance-Adjusted Leq | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 1-hour Leq | Source Elevation (ft)                                  | Receiver Elevation (ft)                        | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | ILBarr (dB) |  |  |  |  |
| Decomission                           | Concrete Saw                      | 0                                                                                       | 85.4                                            | Concrete/Industrial Saws                               | 100                          | 0.1                                   |                            | 76.4                  | 1                                | 60                                 | 0                    | 2.2                                                    | 5                                              | 0                   | 5                                 | 170                              | 175                               | 5.5      | 170.1    | 175.0    | 0.00                       | 0.1        | 3.6                 | 3.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Crane                             | 2                                                                                       | 74.2                                            | Cranes                                                 | 100                          | 13.8                                  |                            | 52.8                  | 1                                | 60                                 | 56                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Dozer                             | 2                                                                                       | 80.0                                            | Rubber Tired Dozers                                    | 100                          | 13.8                                  |                            | 58.0                  | 1                                | 60                                 | 61                   | 5.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.4      | 170.1    | 175.0    | 3.50                       | 15.0       | 17.2                | 5.2                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 2                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 100                          | 13.9                                  |                            | 53.6                  | 1                                | 60                                 | 57                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | 1                                                      |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 63.2                |             |  |  |  |  |
| Demolition                            | Dozer                             | 1                                                                                       | 80.0                                            | Rubber Tired Dozers                                    | 350                          | 0.1                                   |                            | 58.4                  | 8                                | 480                                | 67                   | 5.3                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.3      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.2                 | 5.2                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Concrete Saw                      | 0                                                                                       | 85.4                                            | Concrete/Industrial Saws                               | 350                          | 0.1                                   |                            | 63.7                  | 8                                | 480                                | 0                    | 2.2                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 5.5      | 170.1    | 175.0    | 0.00                       | 0.1        | 3.6                 | 3.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Backhoe                           | 1                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 350                          | 0.1                                   |                            | 54.2                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.8                 | 4.8                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Decomission Phase:                   |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 68.9        |  |  |  |  |
| Site Prep                             | Front End Loader (Cydical)        | 1                                                                                       | 72.4                                            | Tractors/Loaders/Backhoes                              | 50                           | 0.1                                   |                            | 72.2                  | 8                                | 480                                | 81                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Excavator                         | 1                                                                                       | 75.9                                            | Excavators                                             | 50                           | 0.1                                   |                            | 75.7                  | 8                                | 480                                | 85                   | 6.2                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.6                 | 5.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Dozer                             | 1                                                                                       | 80.0                                            | Rubber Tired Dozers                                    | 50                           | 0.1                                   |                            | 79.8                  | 8                                | 480                                | 89                   | 5.3                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.3      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.2                 | 5.2                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Site Prep Phase:                             |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 98.8                |             |  |  |  |  |
| Substation Site Preparation           | Front End Loader (Cydical)        | 1                                                                                       | 72.4                                            | Tractors/Loaders/Backhoes                              | 1000                         | 0.1                                   |                            | 40.7                  | 8                                | 480                                | 50                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Excavator                         | 1                                                                                       | 75.9                                            | Excavators                                             | 1000                         | 0.1                                   |                            | 44.2                  | 8                                | 480                                | 53                   | 6.2                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.6                 | 5.6                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Dozer                             | 1                                                                                       | 80.0                                            | Rubber Tired Dozers                                    | 1000                         | 0.1                                   |                            | 48.3                  | 8                                | 480                                | 57                   | 5.3                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.3      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.2                 | 5.2                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Substation Site Preparation Phase:           |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 59.2                |             |  |  |  |  |
| Grading                               | Grader (passby)                   | 1                                                                                       | 78.5                                            | Graders                                                | 50                           | 0.1                                   |                            | 78.4                  | 8                                | 480                                | 87                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Backhoe                           | 1                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 50                           | 0.1                                   |                            | 75.7                  | 8                                | 480                                | 85                   | 4.5                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.8                 | 4.8                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Compactor (Roller)                | 1                                                                                       | 82.4                                            | Rollers                                                | 50                           | 0.1                                   |                            | 82.3                  | 8                                | 480                                | 91                   | 4.4                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.7                 | 4.7                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Grading Phase:                               |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 93.4                |             |  |  |  |  |
| Substation Site Grading               | Grader (passby)                   | 1                                                                                       | 78.5                                            | Graders                                                | 1000                         | 0.1                                   |                            | 46.8                  | 8                                | 480                                | 56                   | 6.0                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 0.00                       | 0.1        | 5.5                 | 5.5                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Backhoe                           | 1                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 1000                         | 0.1                                   |                            | 44.1                  | 8                                | 480                                | 53                   | 4.5                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.8                 | 4.8                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       | Compactor (Roller)                | 1                                                                                       | 82.4                                            | Rollers                                                | 1000                         | 0.1                                   |                            | 50.7                  | 8                                | 480                                | 60                   | 4.4                                                    | 5                                              |                     | 5                                 | 170                              | 175                               | 6.7      | 170.1    | 175.0    | 0.00                       | 0.1        | 4.7                 | 4.7                 | 0.7              | 0.7                 | 0.1         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Substation Site Grading Phase:               |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 61.8                |             |  |  |  |  |
| Substation Installation               | Man Lift                          | 1                                                                                       | 72.1                                            | Aerial Lifts                                           | 1000                         | 9.1                                   |                            | 31.3                  | 8                                | 480                                | 40                   | 5.8                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.5      | 170.0    | 175.0    | 0.49                       | 9.9        | 13.4                | 5.4                 | 0.5              | 0.7                 | 9.1         |  |  |  |  |
|                                       | Compressor                        | 0                                                                                       | 65.6                                            | Air Compressors                                        | 1000                         | 13.2                                  |                            | 20.8                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.2      | 170.0    | 175.0    | 1.25                       | 13.9       | 12.7                | 4.7                 | 0.5              | 0.7                 | 13.2        |  |  |  |  |
|                                       | Directional Drill Rig             | 1                                                                                       | 67.9                                            | Bore/Drill Rigs                                        | 1000                         | 13.8                                  |                            | 22.5                  | 8                                | 480                                | 32                   | 4.0                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 6.4      | 170.0    | 175.0    | 1.43                       | 14.5       | 12.5                | 4.5                 | 0.5              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                                                                                       | 72.1                                            | Forklifts                                              | 1000                         | 9.1                                   |                            | 31.3                  | 8                                | 480                                | 40                   | 5.8                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.5      | 170.0    | 175.0    | 0.49                       | 9.9        | 13.4                | 5.4                 | 0.5              | 0.7                 | 9.1         |  |  |  |  |
|                                       | Excavator                         | 1                                                                                       | 75.9                                            | Trenchers                                              | 1000                         | 7.6                                   |                            | 36.6                  | 8                                | 480                                | 46                   | 6.2                                                    | 5                                              | 8                   | 5                                 | 170                              | 175                               | 5.3      | 170.0    | 175.0    | 0.34                       | 8.4        | 13.6                | 5.6                 | 0.5              | 0.7                 | 7.6         |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Substation Installation Phase:       |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 47.8        |  |  |  |  |
| Gen-Tie Foundation and Tower Erection | Compressor                        | 0                                                                                       | 65.6                                            | Air Compressors                                        | 100                          | 13.9                                  |                            | 43.3                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                                                                                       | 74.2                                            | Cranes                                                 | 100                          | 13.8                                  |                            | 52.8                  | 8                                | 480                                | 62                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                                                                                       | 72.1                                            | Forklifts                                              | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Pump                              | 1                                                                                       | 72.8                                            | Pumps                                                  | 100                          | 13.9                                  |                            | 50.3                  | 8                                | 480                                | 59                   | 3.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.6      | 170.1    | 175.0    | 4.74                       | 15.0       | 16.4                | 4.4                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Welding Machine                   | 1                                                                                       | 71.2                                            | Welders                                                | 100                          | 14.0                                  |                            | 48.3                  | 8                                | 480                                | 57                   | 2.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 10.7     | 170.1    | 175.0    | 5.86                       | 15.0       | 15.8                | 3.8                 | 0.5              | 0.7                 | 14.0        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for Gen-Tie Stringing and Pulling Phase: |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 65.8        |  |  |  |  |
| Gen-Tie Stringing and Pulling         | Man Lift                          | 1                                                                                       | 72.1                                            | Aerial Lifts                                           | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 1                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 100                          | 13.9                                  |                            | 53.6                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Gen-Tie Foundation and Tower Erection Phase: |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 64.3                |             |  |  |  |  |
| SCE Upgrades                          | Compressor                        | 0                                                                                       | 65.6                                            | Air Compressors                                        | 110                          | 13.9                                  |                            | 42.2                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                                                                                       | 74.2                                            | Cranes                                                 | 110                          | 13.8                                  |                            | 51.6                  | 8                                | 480                                | 61                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Excavator                         | 1                                                                                       | 75.9                                            | Excavators                                             | 110                          | 13.8                                  |                            | 52.9                  | 8                                | 480                                | 62                   | 6.2                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.7      | 170.1    | 175.0    | 2.80                       | 15.0       | 17.6                | 5.6                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                                                                                       | 72.1                                            | Rough Terrain Forklifts                                | 110                          | 13.8                                  |                            | 49.0                  | 8                                | 480                                | 58                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Front End Loader (Passby)         | 0                                                                                       | 71.2                                            | Skid Steer Loaders                                     | 110                          | 13.8                                  |                            | 48.1                  | 8                                | 480                                | 0                    | 5.4                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.3      | 170.1    | 175.0    | 3.42                       | 15.0       | 17.2                | 5.2                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Front End Loader (Cydical)        | 1                                                                                       | 72.4                                            | Tractors/Loaders/Backhoes                              | 110                          | 13.8                                  |                            | 49.4                  | 8                                | 480                                | 58                   | 6.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.8      | 170.1    | 175.0    | 2.95                       | 15.0       | 17.5                | 5.5                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Excavator                         | 1                                                                                       | 75.9                                            | Trenchers                                              | 110                          | 13.8                                  |                            | 52.9                  | 8                                | 480                                | 62                   | 6.2                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 7.7      | 170.1    | 175.0    | 2.80                       | 15.0       | 17.6                | 5.6                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      |                                                        | Total for SCE Upgrades Phase:                  |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  |                     | 67.5        |  |  |  |  |
| Battery/Container Installation        | Compressor                        | 0                                                                                       | 65.6                                            | Air Compressors                                        | 100                          | 13.9                                  |                            | 43.3                  | 8                                | 480                                | 0                    | 4.3                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.2      | 170.1    | 175.0    | 4.32                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       | Crane                             | 1                                                                                       | 74.2                                            | Cranes                                                 | 100                          | 13.8                                  |                            | 52.8                  | 8                                | 480                                | 62                   | 7.7                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.6      | 170.1    | 175.0    | 1.72                       | 15.0       | 18.4                | 6.4                 | 0.4              | 0.6                 | 13.8        |  |  |  |  |
|                                       | Man Lift                          | 1                                                                                       | 72.1                                            | Forklifts                                              | 100                          | 13.8                                  |                            | 50.2                  | 8                                | 480                                | 59                   | 5.8                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.0      | 170.1    | 175.0    | 3.11                       | 15.0       | 17.4                | 5.4                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Backhoe                           | 1                                                                                       | 75.8                                            | Tractors/Loaders/Backhoes                              | 100                          | 13.9                                  |                            | 53.6                  | 8                                | 480                                | 63                   | 4.5                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.0      | 170.1    | 175.0    | 4.16                       | 15.0       | 16.8                | 4.8                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Battery/Container Installation Phase:        |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 66.2                |             |  |  |  |  |
| Paving                                | Paving - Concrete (Triple Roller) | 1                                                                                       | 85.1                                            | Pavers                                                 | 100                          | 13.8                                  |                            | 63.0                  | 8                                | 480                                | 72                   | 5.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 8.6      | 170.1    | 175.0    | 3.75                       | 15.0       | 17.0                | 5.0                 | 0.4              | 0.7                 | 13.8        |  |  |  |  |
|                                       | Paving - Coldmix                  | 1                                                                                       | 73.3                                            | Paving Equipment                                       | 100                          | 13.7                                  |                            | 52.2                  | 8                                | 480                                | 61                   | 8.0                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 6.4      | 170.1    | 175.0    | 1.52                       | 14.8       | 18.5                | 6.5                 | 0.4              | 0.6                 | 13.7        |  |  |  |  |
|                                       | Compactor (Roller)                | 1                                                                                       | 82.4                                            | Rollers                                                | 100                          | 13.9                                  |                            | 60.1                  | 8                                | 480                                | 69                   | 4.4                                                    | 5                                              | 12                  | 5                                 | 170                              | 175                               | 9.1      | 170.1    | 175.0    | 4.24                       | 15.0       | 16.7                | 4.7                 | 0.5              | 0.7                 | 13.9        |  |  |  |  |
|                                       |                                   |                                                                                         |                                                 |                                                        |                              |                                       |                            |                       |                                  |                                    |                      | Total for Paving Phase:                                |                                                |                     |                                   |                                  |                                   |          |          |          |                            |            |                     |                     |                  | 74.1                |             |  |  |  |  |

## Appendix B -- Construction Noise Modeling Data

RCNM2\_ [REDACTED] Dudek Project No. 13594.09 NSR\_stationary\_mitigated

## Appendix B -- Construction Noise Modeling Data

RCNM2\_ [REDACTED] Dudek Project No. 13594.09 NSR\_stationary

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## **Appendix 3.7C**

### Construction Vibration Calculations

| Source              | PPV @ 25    | PPV @ 25 | 50    | 100   | 150   | 200   | 500   | 1000  |
|---------------------|-------------|----------|-------|-------|-------|-------|-------|-------|
| Pile Driver (Sonic) | upper range | 0.734    | 0.342 | 0.160 | 0.102 | 0.075 | 0.027 | 0.013 |
|                     | typical     | 0.17     | 0.079 | 0.037 | 0.024 | 0.017 | 0.006 | 0.003 |
| Vibratory Roller    |             | 0.21     | 0.098 | 0.046 | 0.029 | 0.021 | 0.008 | 0.004 |
| Large bulldozer     |             | 0.089    | 0.042 | 0.019 | 0.012 | 0.009 | 0.003 | 0.002 |
| Caisson drilling    |             | 0.089    | 0.042 | 0.019 | 0.012 | 0.009 | 0.003 | 0.002 |
| Loaded trucks       |             | 0.076    | 0.035 | 0.017 | 0.011 | 0.008 | 0.003 | 0.001 |
| Small bulldozer     |             | 0.003    | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |

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## **Appendix 3.7D**

### Stationary Operations Source Inputs

|                        | 1/3 Octave Spectrum (dB), 25 to 500 Hz |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|----------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | 25                                     | 31.5 | 40   | 50   | 63   | 80   | 100  | 125  | 160  | 200  | 250  | 315  | 400  | 500  |
| PCS                    | 96.9                                   | 91.6 | 86.8 | 82.4 | 79.1 | 77.4 | 79.4 | 78.7 | 80.6 | 78.9 | 83.5 | 82.1 | 77.7 | 77.1 |
| BESS                   | 74.6                                   | 73.9 | 75.6 | 76.7 | 72.7 | 76.1 | 71   | 71.1 | 69.6 | 70.5 | 73.5 | 71   | 69.2 | 71.2 |
| Substation Transformer |                                        | 101  |      |      | 106  |      |      | 108  |      |      | 103  |      |      | 103  |

|                        | 1/3 Octave Spectrum (dB), 600 to 10,000 Hz |      |      |      |      |      |      |      |      |      |      |      |       | Overall A-<br>Wtd | Overall<br>Unweighted |
|------------------------|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|-------|-------------------|-----------------------|
|                        | 630                                        | 800  | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | 6300 | 8000 | 10000 |                   |                       |
| PCS                    | 75.4                                       | 73.2 | 72.2 | 71.7 | 70.3 | 68.5 | 67.6 | 64.7 | 63   | 60.2 | 56.5 | 52.8 | 51.5  | 83.8              | 99.1                  |
| BESS                   | 69.7                                       | 69.6 | 69.6 | 69.2 | 66.7 | 65.7 | 65.1 | 63.5 | 59.9 | 57.3 | 53.6 | 51.6 | 45.4  | 78.4              | 85.4                  |
| Substation Transformer |                                            |      | 97   |      |      | 92   |      |      | 87   |      |      | 80   |       | 103.4             | 112.1                 |