BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

CASCADIA WATER, LLC.

Respondent.

DOCKET UW-240151

SCOTT DUREN
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

EXHIBIT SD-6

Cascadia's Response to Public Counsel Data Request No. 35

January 22, 2025

NW Natural®

Rates & Regulatory Affairs
UW-240151
Cascadia Water LLC Proposed General Rate Case
Data Request Response

Date of Response: December 5, 2024
Responder/Witness: Culley Lehman
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Email: culley@cascadiawater.com

Request No.: UW-240151 PC DR 35

Please provide the location and capacity for each water source associated with a generator installation included in Project #12–Generators for multiple systems. For generators within the W&B Waterworks #1, CAL Waterworks, Sea View, TEL 1, TEL 3, TEL 4, and Silvery Lake systems, please provide a narrative explanation of anticipated reductions in standby storage volumes and how that will be implemented within each system. Please also include a narrative description of justification for prioritizing the addition of generators within each system within this rate case.

Response:

Generators were prioritized for multiple reasons. Auxiliary power for well production allows for a reduction in SB volume. In other cases, the generators provide auxiliary power to booster pumps which are required to maintain system pressures. For systems where booster pumps provide system pressurization, a power outage would result in system depressurization (Pressure Loss).

The sources which have been supplemented by backup power generators are organized below under their respective water system with relevant justification. The following sources have had generators installed:

1. Island Lake (Water System ID: 36150 W)– Kitsap County, Washington
    a. Well 2 – 70 gpm
    b. Well 3 – 70 gpm

Island Lake: The distribution system is pressurized by booster pumps. Auxiliary power provides system pressurization and source production during power outages.

2. Diamond Point (Water System ID: 19210 4) – Clallam County, Washington
    a. Well 1 – 150 gpm
    b. Well 2 – 150 gpm

Diamond Point: The system is pressurized by gravity from water level elevations in the three reservoirs. SB volume is reduced due to the presence of auxiliary power for sources. In addition, auxiliary power is necessary to power the transfer pumps which fill the elevated reservoir.

3. Lynch Cove (Water System ID: 49100 U) – Mason County, Washington
    a. Well 1 – 120 gpm
    b. Well 2 – 85 gpm
    c. Well 4 – 35 gpm
    d. Well 5 – 35 gpm

Lynch Cove: The distribution system is pressurized by booster pumps. Auxiliary power provides system pressurization and source production during power outages

4. Discovery Bay Village (Water System ID: 19430 W) – Jefferson County, Washington
    a. Well 1 – 26 gpm
    b. Well 2 – 49 gpm

Discovery Bay: Most of the system is pressurized by gravity from a single reservoir, however an elevated zone requires a booster pump to provide adequate service pressures. Without auxiliary power these services would lose pressure in a power outage situation.

5. Monterra (Water System ID: 55990 Y) – Clallam County, Washington
    a. Well 1 – 180 gpm
    b. Well 2 – 180 gpm

Monterra: The distribution system is pressurized by well pumps and booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

6. Estates, Inc. (Water System ID: 08166 9) – Clallam County, Washington

a. Well 1 – 200 gpm

b. Well 2 – 200 gpm

Estates, Inc: The distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

7. Bacus Road #1 (Water System ID: 64327 Y) – Skagit County, Washington

    a. Well 1 – 40 gpm

Bacus Road #1: The distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

8. Cedarhearth (Water System ID: 96889 D) – Island County, Washington

    a. Well 1 – 40 gpm

Cedarhearth: The entire distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

9. Lake Alyson (Water System ID: 50691 R) – Snohomish County, Washington

    a. Well 1 – 90 gpm

    b. Well 2 – 30 gpm

Lake Alyson: Approximately half of the distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization during power outages in addition to source production during power outages.

10. Silver Lake Water (Water System ID: 79245 N) – Island County, Washington

    a. Well 1 – 58 gpm

    b. Well 2 – 48 gpm

    c. Well 3 – 140 gpm

Silver Lake: Approximately half of the distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

11. TEL Company 1 (Water System ID: 03099 5) –Island County, Washington
    a. Well 1 – 35 gpm
    b. Well 8 – 19 gpm
    c. Well 9 – 19 gpm

TEL Company 1: The distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

12. TEL Company 3 (Water System ID: 93945 8) – Island County, Washington
    a. Well 1 – 25 gpm
    b. Well 2 – 25 gpm

TEL Company 3: The distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

13. TEL Company 4 (Water System ID: 76976 N) - Island County, Washington
    a. Well 1 - 60gpm

TEL Company 4: The system is pressurized by gravity from a single reservoir. The system also has a single well source which is required to maintain reservoir levels for system pressurization. Auxiliary power provides source production to maintain reservoir fill levels during a power outage.

14. TEL Company 5 (Water System ID: 15533 A) – Island County, Washington
    a. Well 1 – 36 gpm

TEL Company 5: The distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

15. TEL Company 6 (Water System ID: 38451 X) – Island County, Washington
    a. Well 1 – 10 gpm

TEL Company 6: The distribution system is pressurized by the well pump. Auxiliary power provides for system pressurization during power outages.

16. TEL Company 10 (Water System ID: 62060 V) – Island County, Washington
    a. Well 1 – 10 gpm
    b. Well 2 – 20 gpm

TEL Company 10: Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

17. TEL Company 11 (Water System ID: 00678 P) – Island County, Washington
    a. Well 1 – 16 gpm

TEL Company 11: Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

18. W&B Waterworks 1 (Water System ID:466703) – Island County, Washington
    a. Well 1- 50 gpm
    b. Well 2- 75 gpm
    c. Well 3- 75 gpm
    d. Well 4- 75gpm

W&B Waterworks #1: The system is primarily pressurized by gravity from water level elevations in the reservoirs. SB volume is reduced due to the presence of auxiliary power for sources. In addition, auxiliary power is necessary to power booster pump need to maintain pressure in the elevated service area adjacent to the reservoir.

19. CAL Waterworks (Water System ID: 310406)- Island County, Washington
    a. Well 1- 45 gpm
    b. Well 2- 45 gpm

CAL Waterworks: The entire distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages, and allows a reduction in the SB volume.

20. Beachcombers H2O Co. (Water System ID: 04979 V) Island County, Washington
    a. Well 1- 66gpm
    b. Well 2- 66gpm

Beachcombers H2O Co.: Approximately half of the distribution system is pressurized by booster pumps. Auxiliary power provides for system pressurization and source production during power outages.

Per Section 7.1.1.3 of the Washington State Department of Health Water System Design Manual (Design Manual), “Standby Storage (SB) volume is intended to provide continued water supply during abnormal operating conditions, such as structural, electrical, mechanical, or treatment process failure; or source contamination (See WAC 246-290-420)”

The Design Manual recommends SB volume equal the maximum day demand (MDD) (for a single day). It also notes that SB can be adjusted based on various factors including two or more sources with auxiliary power. Even for systems/pressure zones with multiple sources, the Design Manual recommends SB volume of at least 200 gallons per ERU.

For W&B Waterworks #1, CAL Waterworks, Sea View Water, TEL Company 1, TEL Company 3, and TEL Company 4, the SB volume was reduced from MDD based on the presence of secondary sources with auxiliary power. Below the noted systems are listed with their approved number of ERUs and the following SB volume data:

1. Recommended SB Volume: MDD (for a single day)
2. Minimum Recommended SB Volume: 200 gallons per ERU
3. SB volume provided

W&B Waterworks #1: 528 ERUs

1. Recommended SB Volume: 330,000 gallons
2. Minimum Recommended SB Volume: 105,600 gallons
3. SB Volume Provided: 138,865 gallons

CAL Waterworks: 193 ERUs

1. Recommended SB Volume: 102,290 gallons
2. Minimum Recommended SB Volume: 38,600 gallons
3. SB Volume Provided: 56,835 gallons

Sea View Water: 210 ERUs

1. Recommended SB Volume: 88,200 gallons
2. Minimum Recommended SB Volume: 42,000 gallons
3. SB Volume Provided: 40,300 gallons

TEL Company 1: 99 ERUs

1. Recommended SB Volume: 91,080 gallons
2. Minimum Recommended SB Volume: 19,800 gallons
3. SB Volume Provided: 37,821 gallons

TEL Company 3: 50 ERUs

1. Recommended SB Volume: 28,000 gallons
2. Minimum Recommended SB Volume: 10,000 gallons
3. SB Volume Provided: 13,025 gallons

TEL Company 4: 44 ERUs

1. Recommended SB Volume: 34,760 gallons
2. Minimum Recommended SB Volume: 8,800 gallons
3. SB Volume Provided: 9,835 gallons