

Proposed off-ramp for water loss performance standards

Staff propose that suppliers with low levels of real loss and reliable data be provided the option of an off-ramp to the regular compliance pathway of the regulation, which includes reducing real loss for most suppliers and submitting additional data for all suppliers. Suppliers that qualify for an off-ramp, would not be required to comply with data submission requirements, or any real loss reduction, as far as they demonstrate that they meet data quality requirements and that their real loss is maintained at or under the threshold level on a three-year average basis. The supplier would demonstrate meeting the data quality requirements by 2022. At the same time the supplier would demonstrate that their real loss is equal to or under the threshold on a three-year average basis beginning 2028.

Program staff proposes that the volumetric threshold for the off-ramp, if adopted, be set at 10 gallons per connection per day for suppliers reporting in gallons per connection per day and 700 gallons per mile per day for suppliers reporting in gallons per mile per day. Suppliers at or below these thresholds, according to the respective reporting metric, that meet the data quality criteria, can avail of the off-ramp.

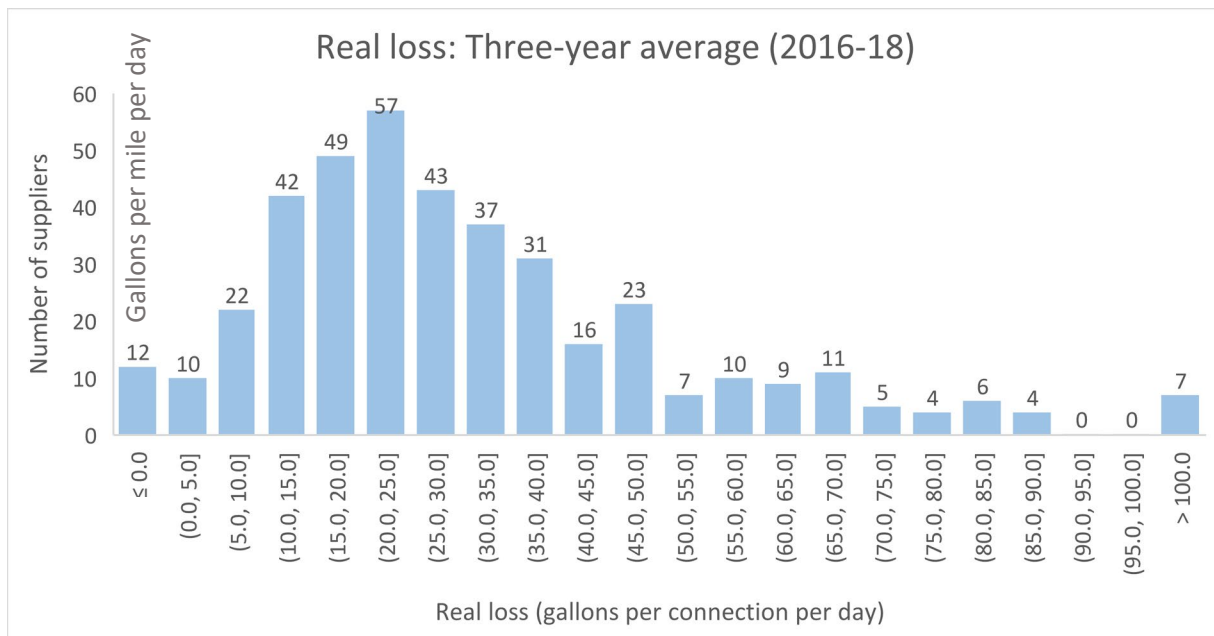


Figure. Three-year average real loss (gallons per connection per day)

The off-ramp threshold is proposed as such due to the following reasons:

- As per reported data, about 74 suppliers have a real loss level of 15 gallons per connection per day and under. Out of those, 42 suppliers report a real loss of between 10 and 15 gallons per connection per day. This means, that if the underlying data is accurate, these many suppliers are able to achieve a real loss level of between 10 and 15 gallons per connection per day.

- Per the economic model and cost-benefit analysis, achieving a reduction of real loss to under 10 gallons per connection per day is observed to not be cost-effective for any supplier. Thus, reducing losses to under 10 gallons per connection per day is generally not feasible.
- Similarly, per the economic model and cost-benefit analysis, achieving a reduction of real loss below 700 gallons per mile per day is observed to not be cost-effective for any supplier. Thus, reducing losses to under 700 gallons per mile per day is generally not feasible.
- Thus, the threshold of 10 gallons per connection per day and 700 gallons per mile per day represent an economically low real loss level for California suppliers, and reducing leakage further would not provide a net benefit to suppliers or the state.

Staff propose that suppliers would meet the proposed criteria for data quality listed below to verify their real loss, to qualify for the off-ramp.

1. The 2016 to 2018 (including reported data for fiscal year 2018-19) reported data for the supplier must not show a variability higher than 10 gallons per connection per day for suppliers reporting in gallons per connection per day or 200 gallons per mile per day for suppliers reporting in gallons per mile per day.
2. If a supplier has reported a negative value for the Current Annual Real Loss in the 2016 to 2019 reported data (including fiscal year 2018-19), provide the identified cause for the negative value and the steps taken to correct it.
3. 100% of the volume from own sources, imported and exported water is metered.
4. If the volume from own sources is greater than 5% of the total water supplied, production meters measuring at least 95% of the total produced volume are tested on an annual basis.
5. If the imported volume is greater than 5% of the total water supplied, supplier must demonstrate the imported water meters measuring at least 95% of the total imported volume are calibrated on an annual basis.
6. If the exported volume is greater than 5% of the total water supplied, exported water meters measuring at least 95% of the total exported volume are tested on an annual basis.
7. A 100 percent of the customer accounts excluding those measuring fire-flow are metered, with at least 90% success rates in meter reading.
8. A statistically significant sample of customer meters determined by the water supplier or 300 meters¹, whichever is lower is tested annually.

¹ A study by Water Systems Optimization, Inc. found that the confidence in meter accuracy does not increase significantly after testing 300 meters, by testing a higher number of meters. This is based on a flow meter testing of 4400 meters, out of which 3900 were installed in California. Source: Kris Williams and Water Systems Optimization, Inc., Small Meter Accuracy – Using Test Data for Better Decision-making, Source Magazine – CA-NV AWWA, V32, N4, Fall 2018.

9. If the unbilled metered volume is higher than 1% of the total water supplied, the supplier reads the meters for accounts that are supplied unbilled unmetered accounts at least annually.