

How Customer Satisfaction Drives Return on Equity for Regulated Utilities

EXECUTIVE INSIGHT REPORT
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J.D. POWER

WELCOME

The purpose of this report is to provide an updated look at customer satisfaction and the impact it has on Return on Equity for regulated electric utilities.

This report is a follow-up from the white paper by Andrew Heath and Dan Seldin titled “*How Customer Satisfaction Drives Return On Equity for Regulated Electric Utilities*” which published in October 2015. The original J.D. Power white paper on this topic was published in May 2012.

The research included in this report updates the previous analysis conducted by J.D. Power, which found that customer satisfaction is a leading indicator of the authorized return on equity for regulated electric utilities.

The data in this report is based on the *J.D. Power Electric Utility Residential Customer Satisfaction Study* and Rate Case data provided by Regulatory Research Associates, or RRA, a group within S&P Global Commodity Insights. The J.D. Power study focuses on understanding the key areas that drive customer satisfaction within the electric utility industry—and when combined with the S&P rate case data—demonstrates how customer satisfaction influences the authorized return on equity (ROE) for regulated electric utilities.

Please feel free to contact the J.D. Power Utility Intelligence team with any questions.



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This Executive Insight Report analyzes customer satisfaction and the impact for regulated electric utilities on the authorized return on equity during a rate case filing



Executive
Summary



Background



Impact on
Satisfaction



Key Findings

Executive Summary

The impact of customer satisfaction on return on equity

For decades, J.D. Power and S&P Global Ratings have examined the relationship between customer satisfaction and financial metrics such as profitability and credit ratings which ultimately lead to looking at the relationship between satisfaction and return on equity (ROE). This report provides an update to the previously published findings.

As the U.S. economy emerges from the COVID-19 pandemic, and the industry faces challenges from rising inflation and interest rates amidst the ongoing energy transition and a robust capital spending cycle, the relationship between customer satisfaction and return on equity will become increasingly important to consider.

When the customer satisfaction results of regulated utilities are categorized into quartiles, data shows that higher levels of

customer satisfaction one year prior to a rate case continue to be associated with higher ROE.

On average, a 10-point increase in satisfaction, based on the 1,000-point index scale utilized by J.D. Power, is associated with a .02% to .04% increase in ROE.

Furthermore, the ROE gap between utilities in the top quartile of customer satisfaction one year prior to the rate increase compared to utilities in the bottom quartile is .3%.

The observed differences in authorized ROE, while relatively small, translate into millions of dollars or more in annualized earnings available to shareholders.

Applying the .3% increase to an equity base of \$1 billion translates into a \$3 million annualized increase in earnings.

Additionally, utilities in the top quartile receive authorized rate increases closer to their request compared to utilities in the bottom quartile.

Utilities in the bottom quartile receive an approval rate that is on average \$2m-\$8m lower than utilities in the upper quartiles, consistent with historical findings.

Continuing to invest in customer satisfaction and the customer experience can yield rewards as significant as investing in tangible assets, such as power plants, transmission lines, and distribution infrastructure.

Satisfaction data continues to show that regulated electric utilities in the top quartile of customer satisfaction report profit margins that are on average 2%-3% higher than utilities in the lower quartiles.

Other factors, especially prevailing interest rates, also drive ROE. Indeed, it is unlikely that customer satisfaction is the main driver of ROE. However, even a relatively small influence on ROE is noteworthy, given the major impact that authorized ROE has on a regulated utility's financial performance.

“Utilities in the top quartile receive authorized rate increases closer to their request compared to utilities in the bottom quartile.”

Background

Replicating the prior analysis, J.D. Power customer satisfaction data by year were merged with rate case data to assess the relationship between satisfaction and rate case outcomes.

J.D. Power Electric Utility Residential Customer Satisfaction Study data from 2014-2020 were examined.

The survey studies customers of large and midsize utilities regarding their experiences with their utility in six key factors: Power Quality & Reliability, Price, Billing & Payment, Communications, Corporate Citizenship, and Customer Care. The relative importance of each factor in relation to overall customer satisfaction with a utility's performance is derived using J.D. Power's proprietary index methodology.

These derived importance weights are then applied to customer ratings, and

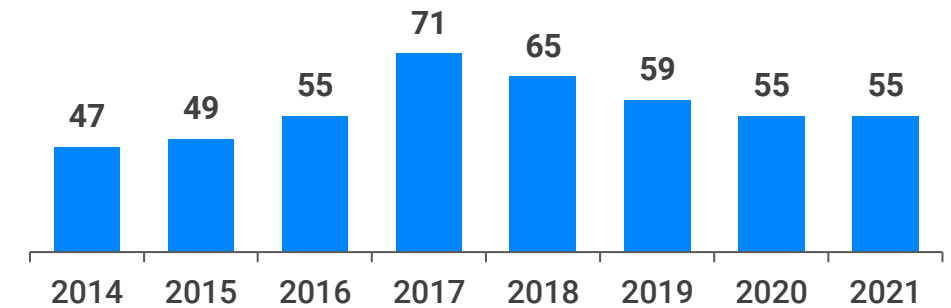
utility company customer satisfaction performance is then based on aggregating the weighted ratings into an overall satisfaction index score on the J.D. Power 1,000-point scale.

National rate case information for 2015 to 2021 was gathered from Regulatory Research Associates' database of regulator requests and outcomes, which is delivered through S&P Capital IQ Pro. This data included the outcomes of 310 rate cases from 2015-2021 in which the state commission established a new ROE.

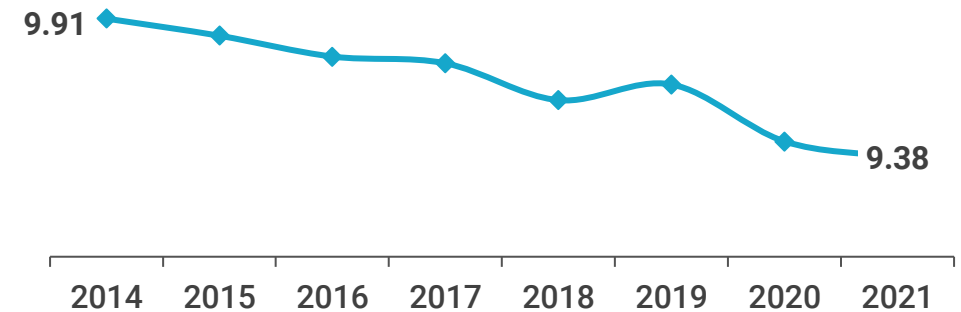
Number of rate case decisions peaked in 2017 and have remained stable over the last few years.

Average return on equity continues to decline year over year, reaching its lowest point in 2021.

Number of Electric Rate Case Decisions



Average Return on Equity (%)



Higher Levels of Customer Satisfaction Increase ROE

By grouping regulated electric utilities into quartiles based on customer satisfaction, we continue to see that higher levels of customer satisfaction one year prior to a rate case are associated with higher ROE.

Furthermore, we continue to see a positive relationship between customer satisfaction and subsequent ROE one year later. A 10-point improvement in the overall satisfaction index score increases ROE between .02% and .04%. In dollar amounts, if a utility were requesting a rate change on an equity base of \$1 billion, it would translate into an increase of \$200,000 to \$400,000 for every 10-point increase in the overall satisfaction index score.

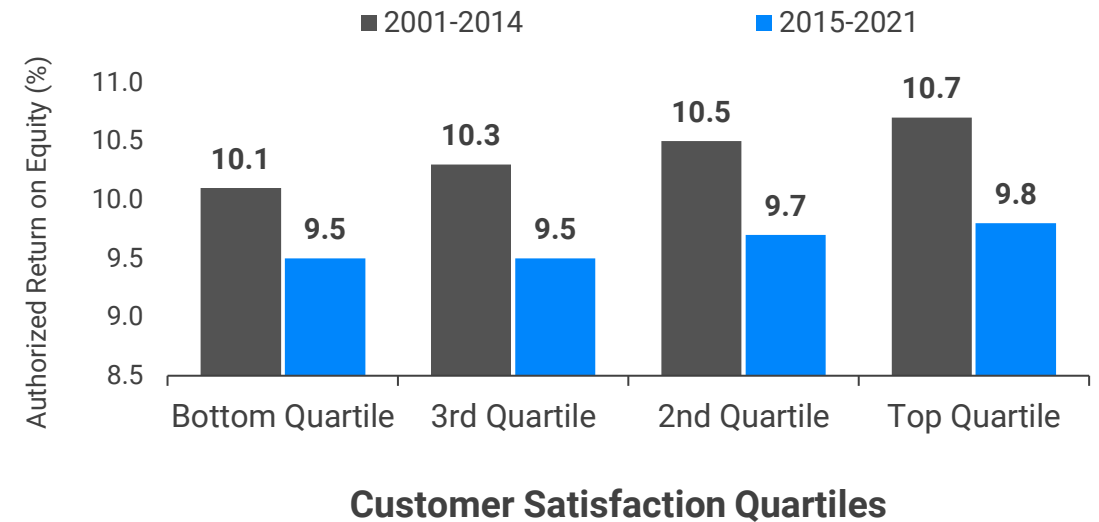
When utilities in the top quartile are compared with those in the bottom quartile, an ROE difference of .3% was found.

This translates into \$3 million more per rate case for the top-quartile vs. bottom-quartile utilities (assuming an equity base of \$1 billion).

Although there is a positive correlation between a company's level of customer satisfaction and their ROE, the outcome is not the same for all utilities.

Some utilities with higher-than-average customer satisfaction receive lower levels of ROE, and, conversely, some utilities with lower-than-average customer satisfaction receive higher levels of ROE.

This variability is to be expected, considering the complex process associated with submitting, reviewing, and approving a rate case. As there are many factors in play driving the relationship between customer satisfaction and ROE.



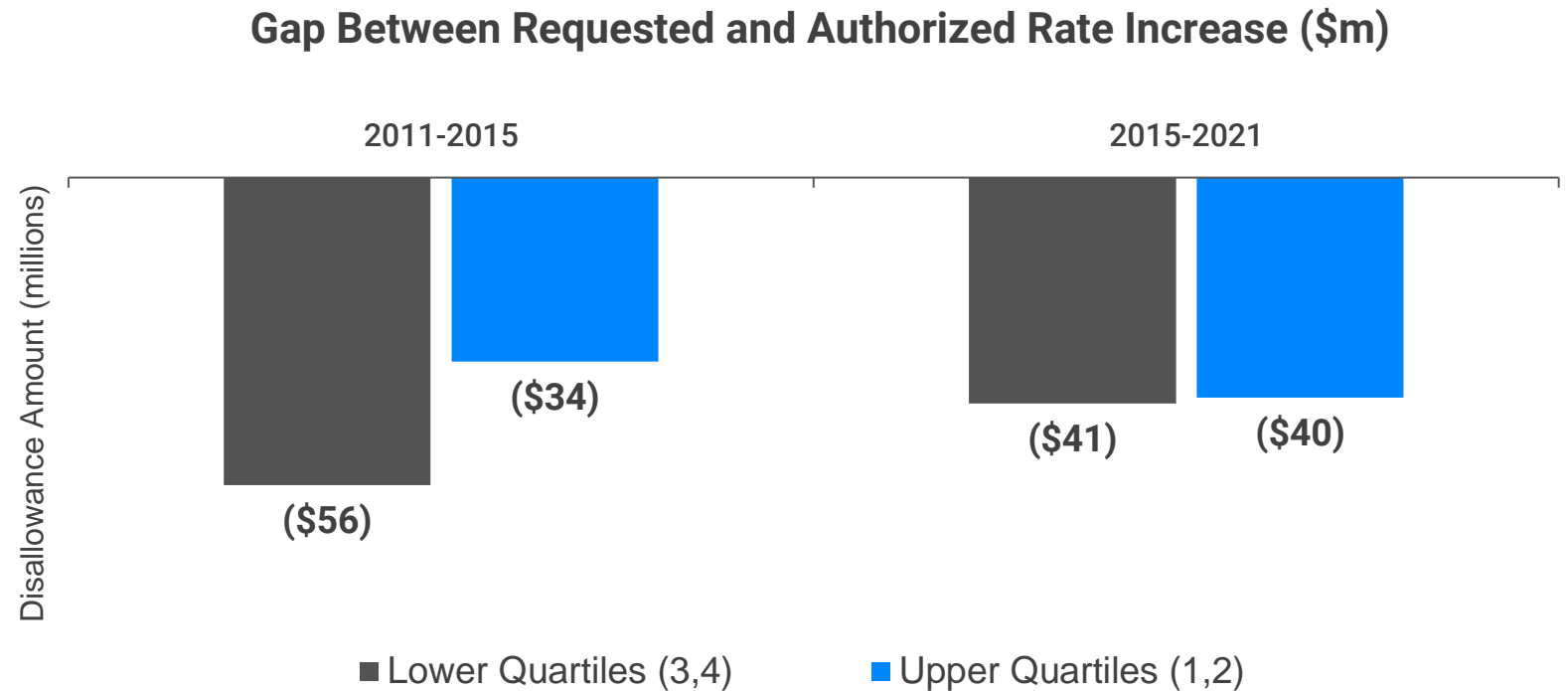
Sources: J.D. Power Electric Utility Residential Customer Satisfaction Study. Regulatory Research Associates; a group within S&P Global Commodity Insights.

Increased Satisfaction Leads to Lower Disapproval Amounts

Utilities in the lower quartiles receive an approval rate that is on average \$1m lower than utilities in the upper quartiles; this is consistent with historical findings, but the gap has reduced sharply.

This is consistent with but not as strong as the pattern with the 2011-2015 data. Like historical findings, all regulated electric utilities receive a lower authorized rate increase than requested.

Prior to 2015, the gap was larger and is now much smaller. However, utilities in the upper quartiles continue to receive rate increases that are closer to their actual request compared to lower quartile utilities.

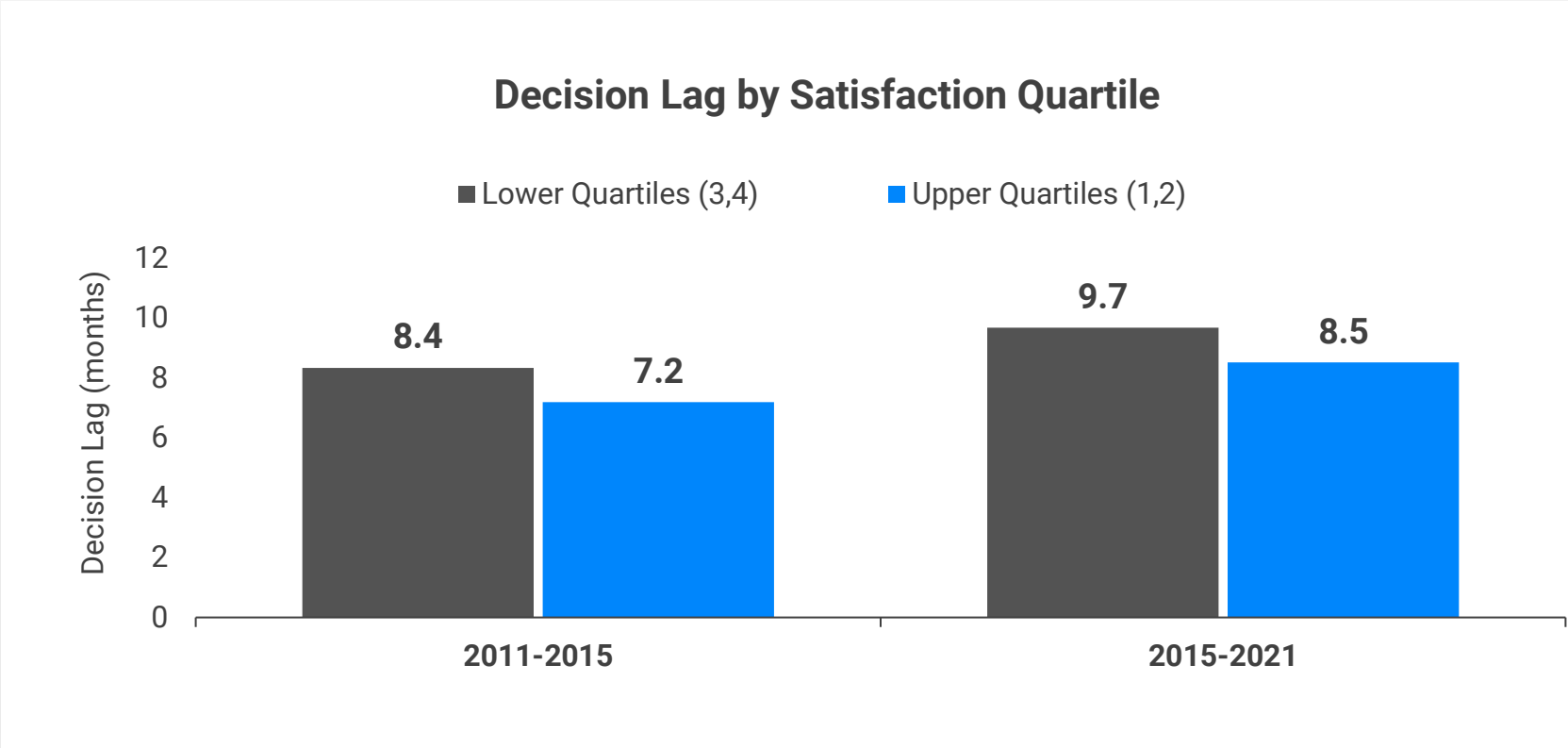


Upper Quartile Utilities Secure Rate Case Approvals Sooner Than Lower Quartile Utilities

Utilities in the upper quartiles of customer satisfaction continue to receive regulatory approval in less than average time, while utilities in the lower quartiles are taking more than average time for approval.

Average time for rate case approvals is increasing—up two months on average. However, even though the average time is increasing, the gap between the upper and lower quartiles remains consistent.

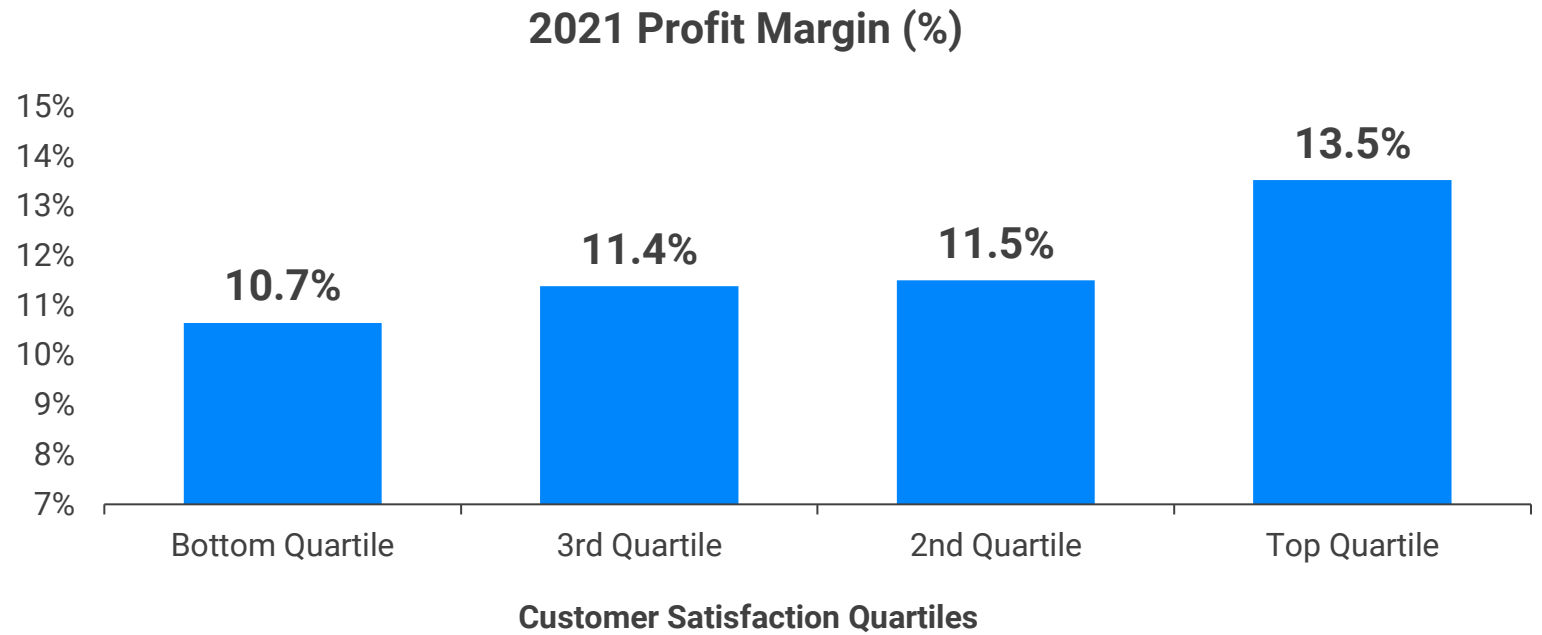
Over the past seven years, the average time taken for all rate cases regardless of quartile is 9.1 months, this is an increase from 7.8 months on average as reported previously.



Top-Quartile Utilities Have Higher Profit Margins

A primary driver and key performance indicator for all companies is profit. J.D Power research continues to show a positive relationship between electric utilities' customer satisfaction performance and reported profit margin.

Electric utilities in the top quartile of customer satisfaction tend to report profit margins that are on average 2%-3% higher than utilities in the three lower quartiles.



Sources: J.D. Power Electric Utility Residential Customer Satisfaction Study.
2021 Regulated Electric Utility Profit Margin based on publicly reported SEC filings.

Key Findings

Supporting historical analysis, customer satisfaction continues to be a leading indicator of the authorized return on equity for regulated electric utilities.

By creating a positive customer experience, and ultimately satisfied customers, regulated electric utilities will continue to receive increased regulatory outcomes and have the continued ability to invest in and support customer satisfaction and the customer experience.

Focusing on a positive customer experience creates a virtuous business circle. Highly satisfied customers lead to positive regulatory outcomes, which then

lead to more support for investments that continue to improve the customer experience. Conversely, customer dissatisfaction can lead to unfavorable regulatory outcomes—which may then limit the amount of funding a utility is able to secure to help them improve the customer experience.

Regulated electric utilities must continue to monitor and track customer satisfaction in order to maximize profits and ROE during a rate case. Understanding how to improve customer satisfaction is crucial in helping utilities improve in both customer satisfaction and ROE.



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