

**EXH. AW-4  
DOCKETS UE-19 \_\_\_/UG-19 \_\_\_  
2019 PSE GENERAL RATE CASE  
WITNESS: ANDREW WAPPLER**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**Docket UE-19 \_\_\_  
Docket UG-19 \_\_\_**

**THIRD EXHIBIT (NONCONFIDENTIAL) TO THE  
PREFILED DIRECT TESTIMONY OF**

**ANDREW WAPPLER**

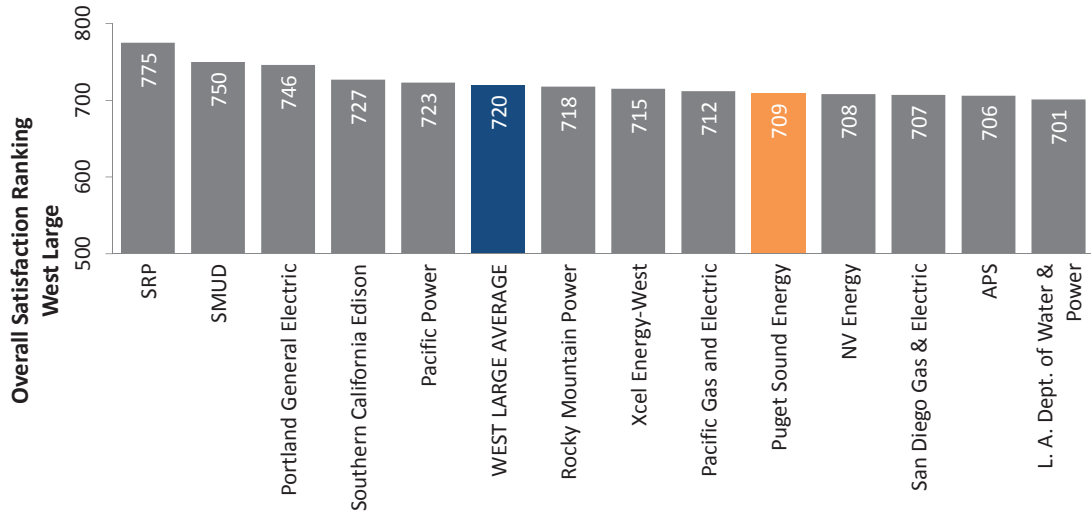
**ON BEHALF OF PUGET SOUND ENERGY**

**JUNE 20, 2019**

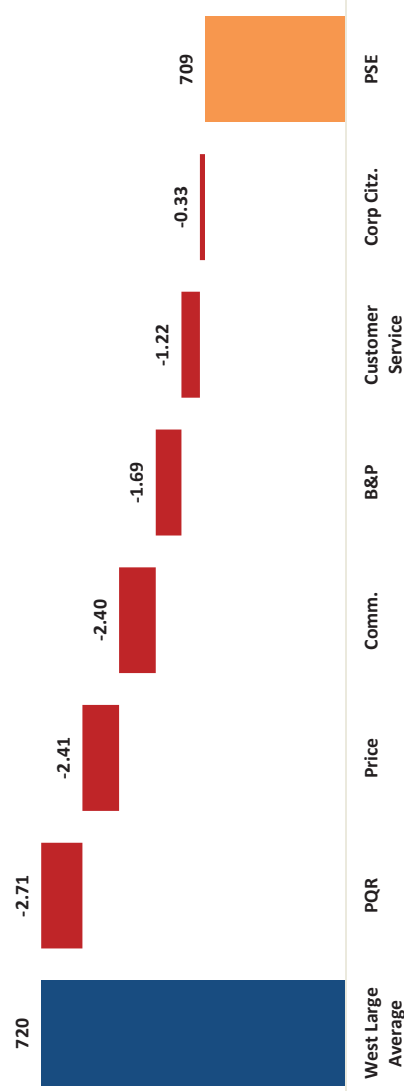
**J.D. Power**  
**Electric Residential Satisfaction Scorecard**  
**Puget Sound Energy - 2017**

Index Scores	2017	vs. 2016	vs. West Large Average	West Large Rank (of 13)	vs. Large Average	Large Rank (of 58)	vs. National Average	National Rank (of 138)
Overall Satisfaction	709	+38	-11	9	-10	38	-10	83
<b>Factors</b>								
Power Quality & Reliability	754	+44	-10	12	-12	46	-13	106
Price	644	+38	-14	9	-16	41	-15	85
Billing & Payment	769	+38	-10	12	-10	46	-9	100
Corporate Citizenship	662	+27	-2	6	+5	17	+6	50
Communications	660	+38	-18	8	-14	35	-12	77
Customer Service	762	+36	-22	13	-22	45	-20	103

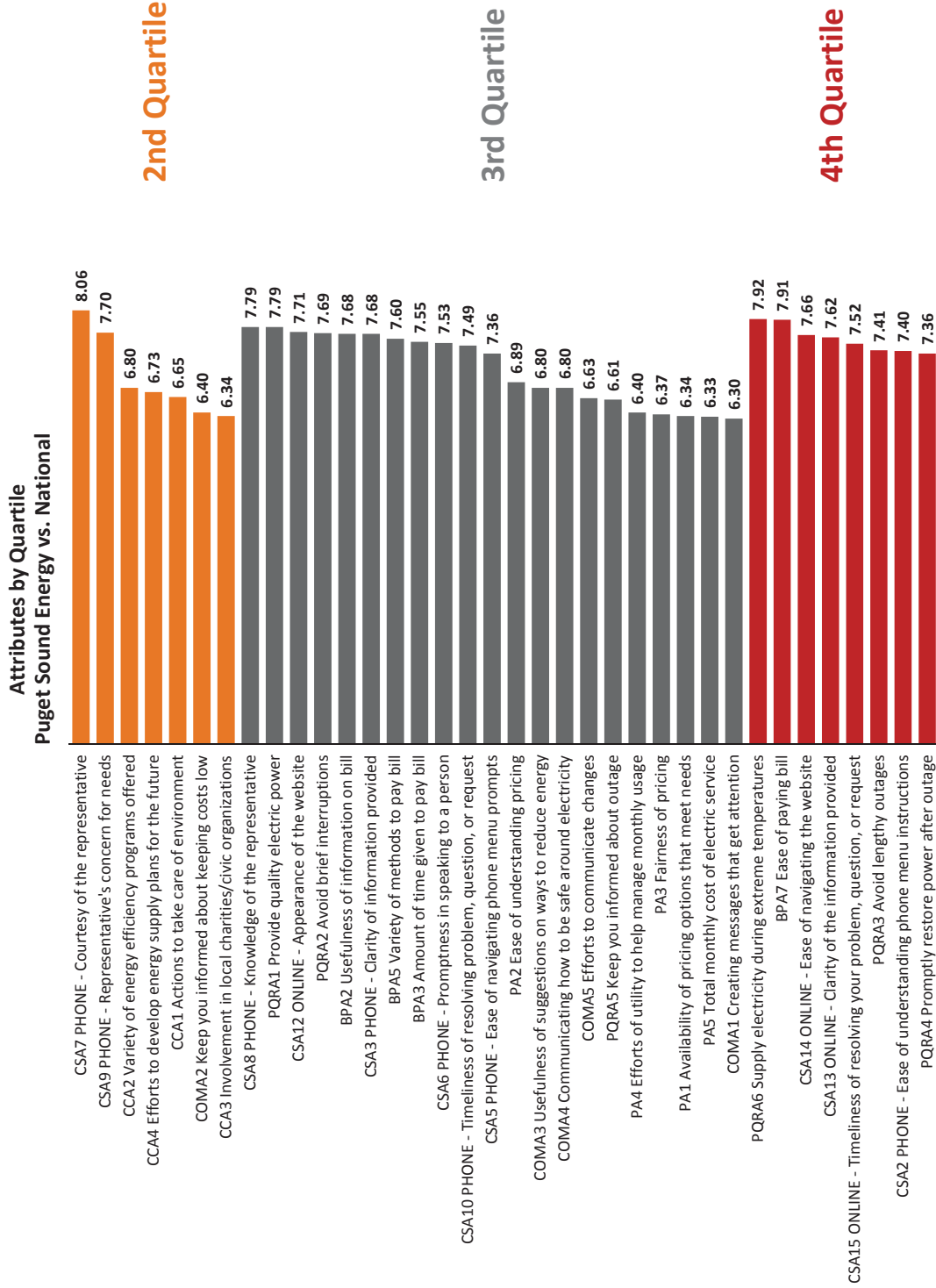
Rank Quartile: ● 1st ● 2nd ● 3rd ● 4th



**Factor Gap Analysis<sup>1</sup>**

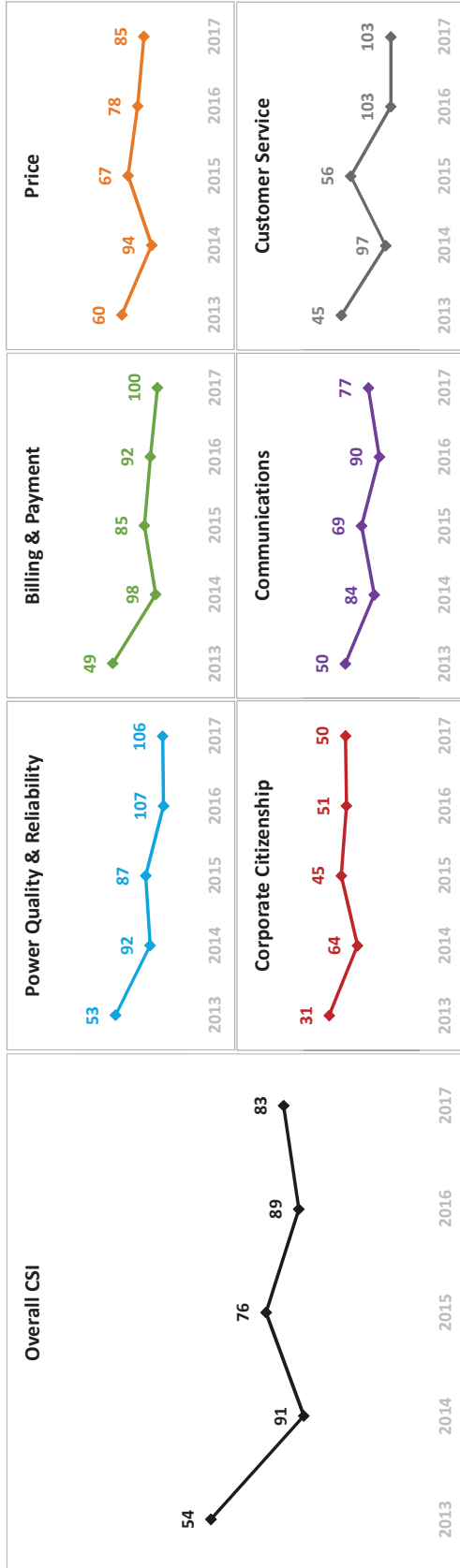


The factor gap analysis may not equal 100% due to rounding.  
<sup>1</sup>(2017 Brand Index - 2017 West Large Average) \* Factor's Importance Weight



This graph shows how each attribute compares to the industry.

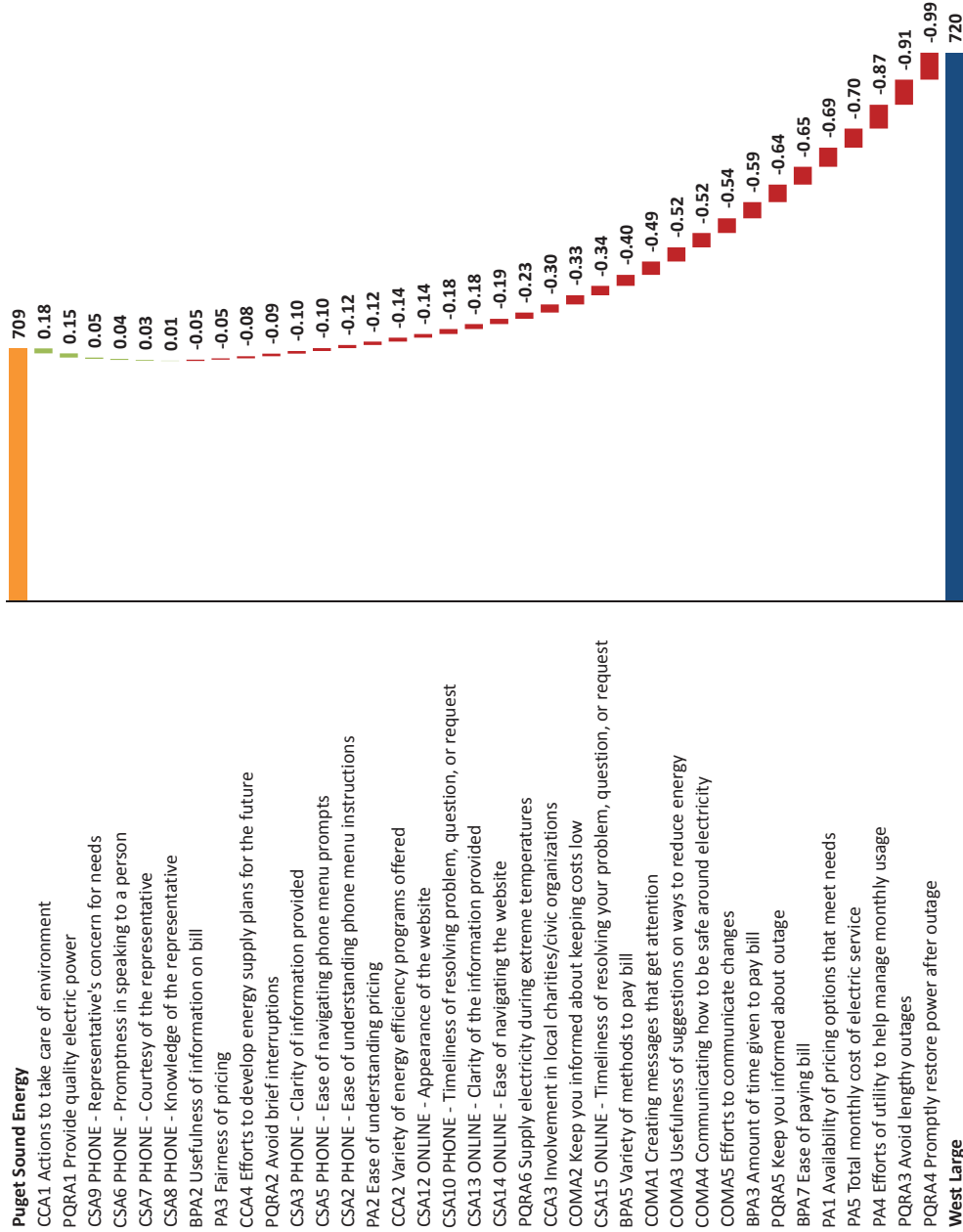
**National Factor Rank Performance  
(out of ranked brands)**



Key Management Metrics	2017	vs. 2016	vs. West Large Average	West Large Rank (of 13)	vs. Large Average	Large Rank (of 58)	vs. National Average	National Rank (of 138)
# of brief interruptions	1.1	0.0	+0.2	10	-0.1	26	-0.1	57
# of lengthy outages	0.7	-0.2	+0.1	8	+0.1	40	+0.1	94
Outage points of information	2.5	0.0	+0.1	5	+0.2	14	+0.2	22
% recall communication	44%	+1.4%	-0.4%	8	+1.3%	20	+0.9%	61
% recall negative media	3%	0.0%	-4.3%	5	-2.2%	21	-1.8%	61
Online first contact resolution	63%	-4.2%	+0.5%	9	-1.3%	41	-1.8%	105
Phone first contact resolution	69%	+0.9%	+1.7%	8	+0.5%	31	0.0%	89
% provided same info 2+ times	29%	+1.5%	-6.0%	6	-3.0%	17	-2.7%	57
% eBill	41%	+1.8%	-2.3%	10	+1.1%	23	+2.5%	34
Average bill amount	\$136	+\$13	+\$14	11	+\$3	29	+\$1	57
Familiarity with energy efficiency programs	47%	-2.3%	-4.0%	10	+2.3%	20	+3.0%	33
Supports development of local community	67%	-1.3%	+4.2%	5	+4.9%	13	+3.8%	61



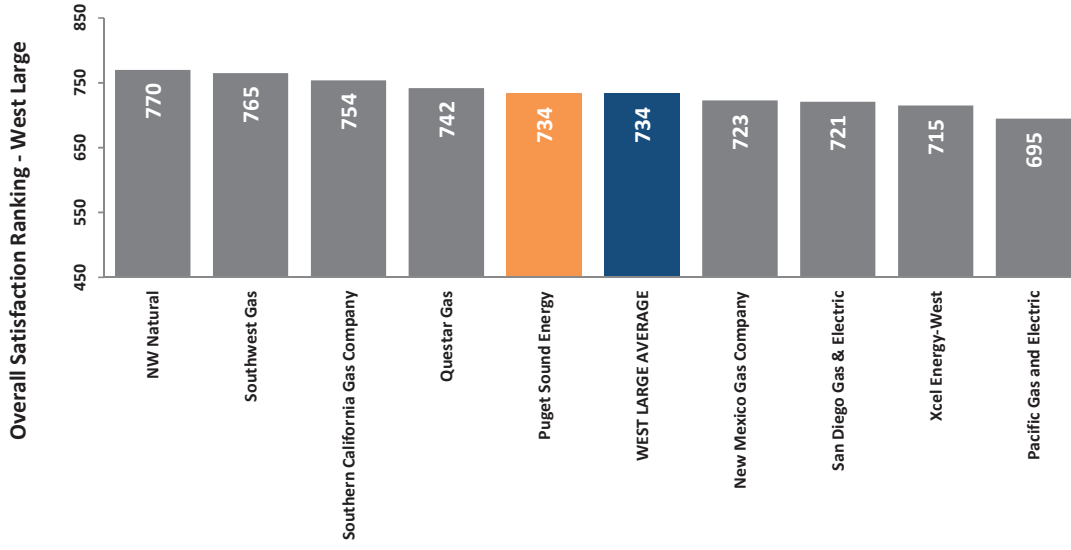
**Attribute Gap Analysis<sup>1</sup>**  
**Puget Sound Energy vs. West Large**



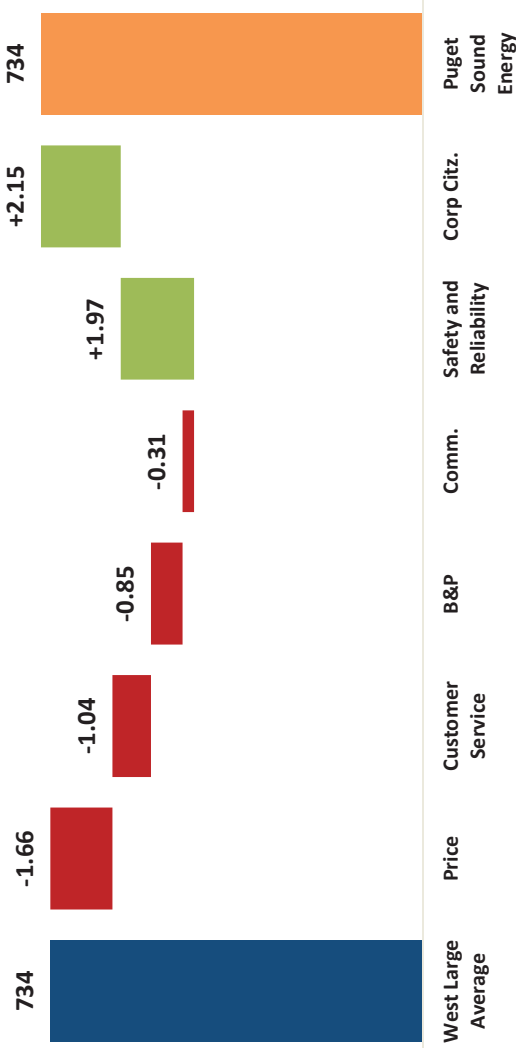
<sup>1</sup>The attribute gap analysis may not equal 100% due to rounding  
<sup>2</sup>(2017 Brand Index - 2017 West Large Average) \* Factor/Attribute's Importance Weight

**J.D. Power**  
**Gas Residential Satisfaction Scorecard**  
**Puget Sound Energy - 2017**

Index Scores	2017	vs. 2016	vs. West Large Average	West Large Rank (of 9)	vs. Industry Average	Industry Rank (of 85)
Overall Satisfaction	734	+18	0	5	-1	33
<b>Factors</b>						
Safety and Reliability	785	+17	+6	5	-3	44
Billing & Payment	775	+17	-4	6	-5	44
Price	677	+21	-9	6	-8	43
Corporate Citizenship	682	+23	+16	3	+22	13
Communications	674	+16	-3	4	+5	26
Customer Service	819	+12	-13	6	-2	35

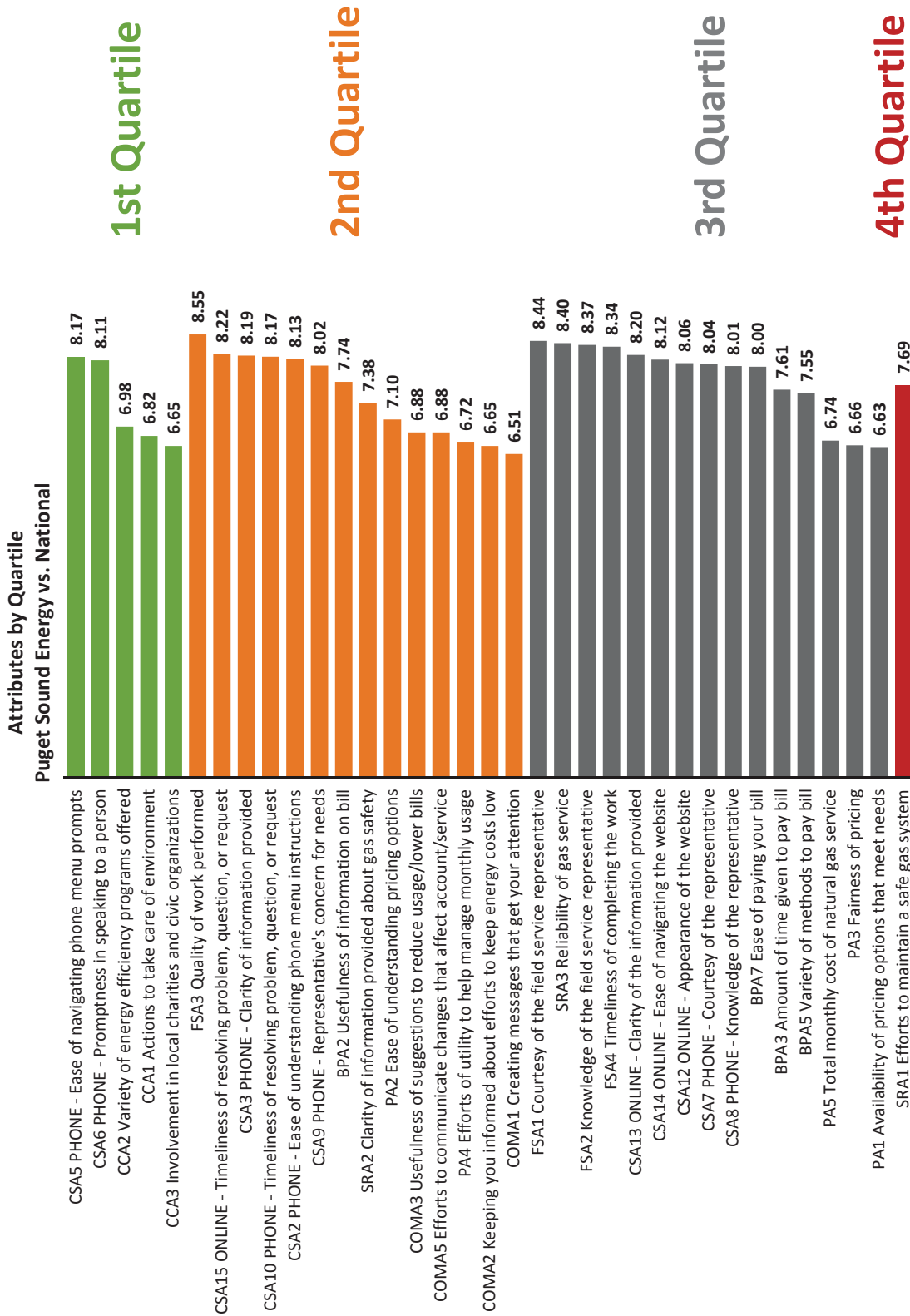


### Factor Gap Analysis<sup>1</sup>



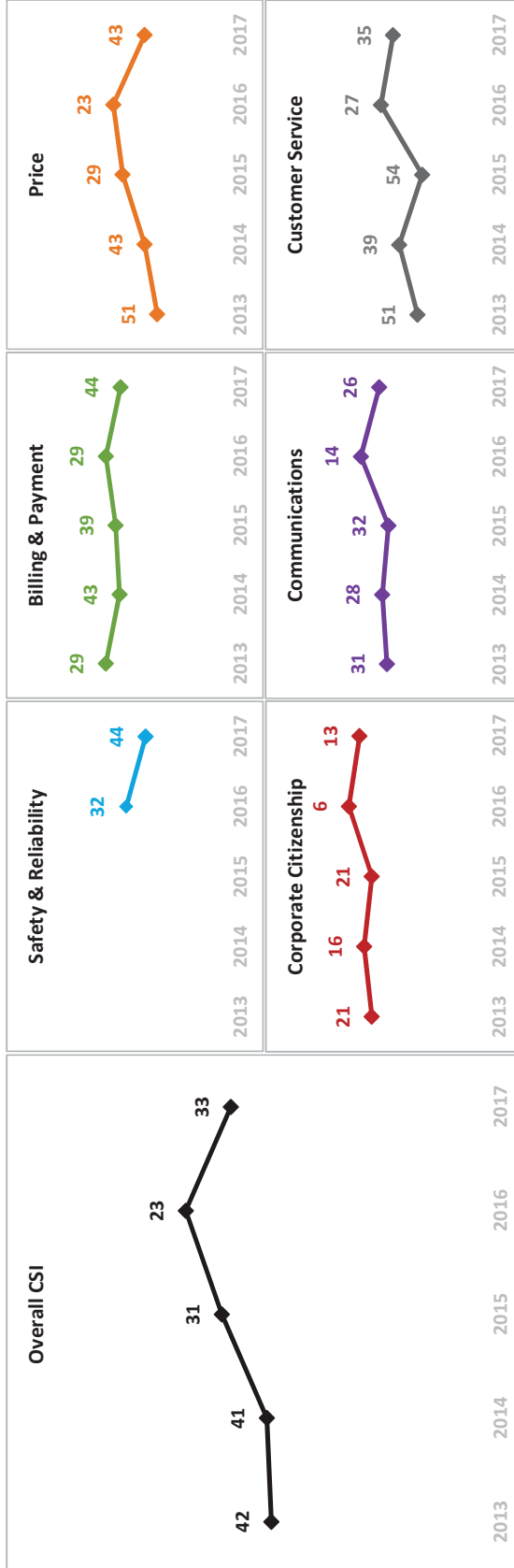
<sup>1</sup>The factor gap analysis may not equal 100% due to rounding  
(2017 Brand Index - 2017 West Large Average) \* Factor's Importance Weight



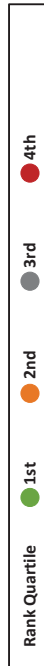


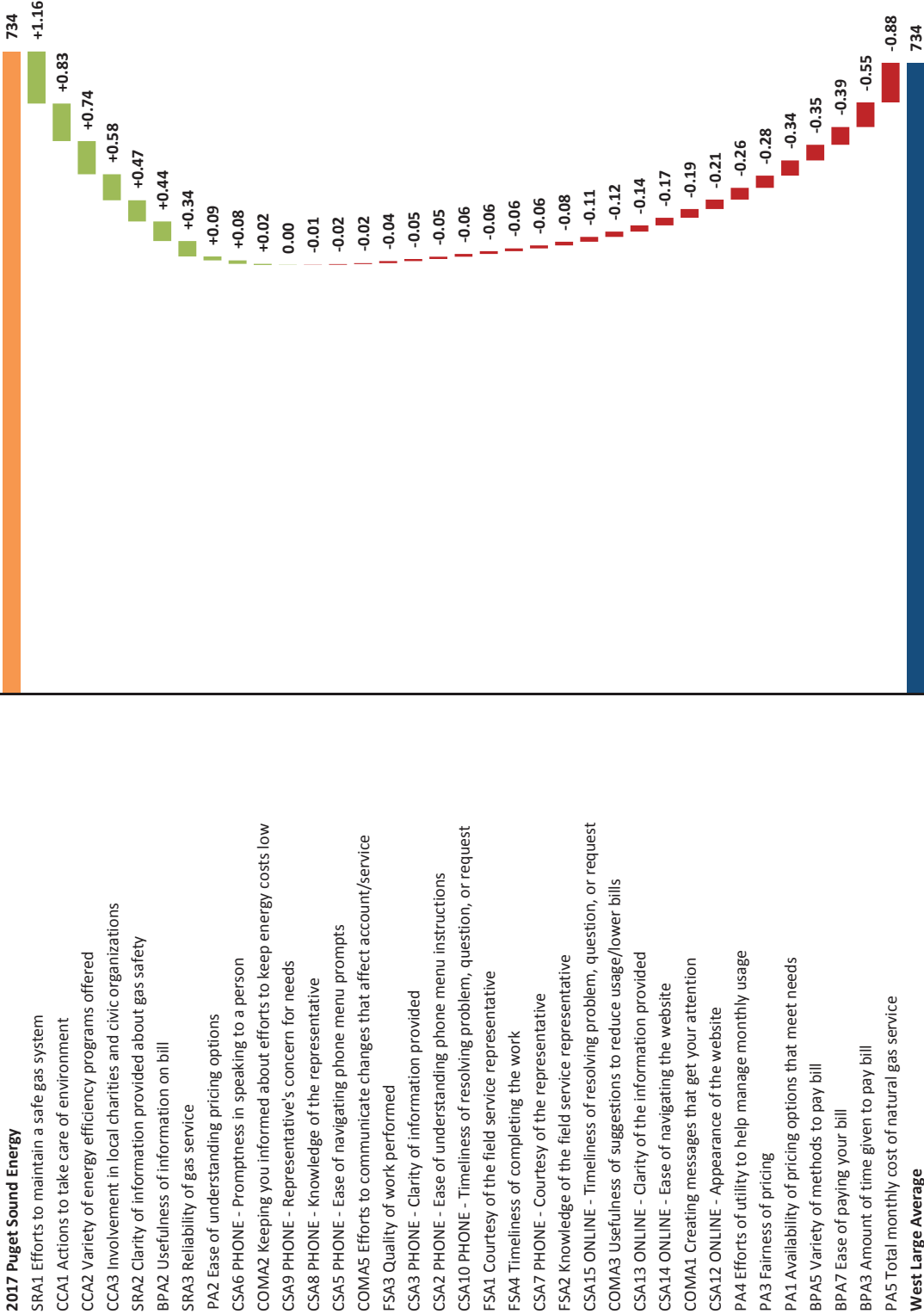
This graph shows how each attribute compares to the industry.

### National Factor Rank Performance (out of ranked brands)



Key Management Metrics	2017	vs. 2016	vs. West Large Average	West Large Rank (of 9)	vs. Industry Average	Industry Rank (of 85)
% Helpful with gas safety	73%	+4.0%	+1.0%	4	+1.0%	26
Number of communications recalled	2.6	0.0	-0.2	8	-0.1	53
% recall utility communication	49%	0%	+7%	1	+6%	15
Phone first contact resolution	66%	-4.6%	-5.0%	9	-4.5%	68
Online first contact resolution	70%	+0.2%	+1.3%	4	+0.9%	40
% online account setup	60%	+1%	-1%	6	+2%	27
% eBill	46%	-1.2%	-2.7%	7	+3.3%	25
Average bill amount	\$97	+\$2	+\$37	9	+\$24	70
% familiar with energy efficiency or conservation programs	43%	-2.6%	+1.2%	3	+7.1%	9
% supports local community development	72%	+1.3%	+9.0%	2	+8.6%	13
% recall employee volunteering	19%	+2.3%	+3.2%	3	+4.6%	17
% aware of local donations and support	19%	-0.9%	+2.1%	4	+3.1%	21





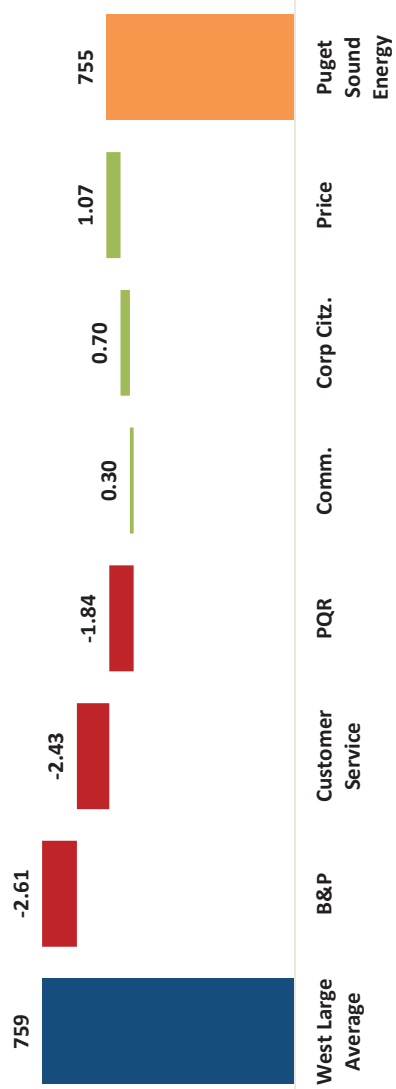
The attribute gap analysis may not equal 100% due to rounding  
 \*(2017 Brand Index - West Large Average) \* Factor/Attribute's Importance Weight

**J.D. Power**  
**Electric Business Customer Satisfaction Scorecard**  
**Puget Sound Energy - 2017**

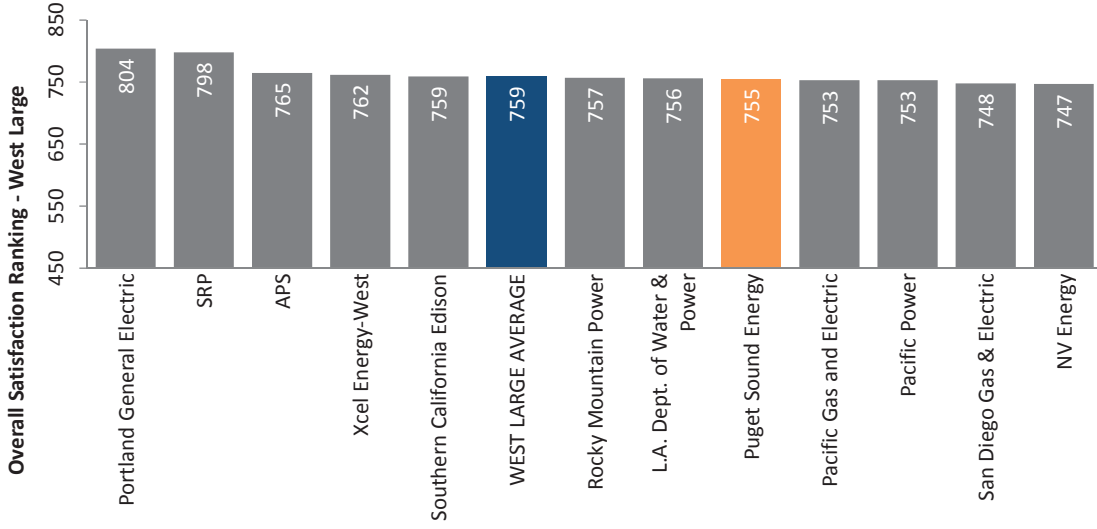
Index Scores	2017	vs. 2016 CY	vs. West Large Average	West Large Rank (of 12)	vs. National Average	National Rank (of 86)
Overall Satisfaction	755	-24	-4	8	-10	56
<b>Factors</b>						
Power Quality & Reliability	785	-21	-9	10	-16	66
Corporate Citizenship	730	-28	+3	5	+3	31
Price	716	-38	+5	6	-6	51
Billing & Payment	783	-22	-19	12	-22	74
Communications	738	-16	+2	4	-3	43
Customer Service	781	-45	-23	12	-25	74



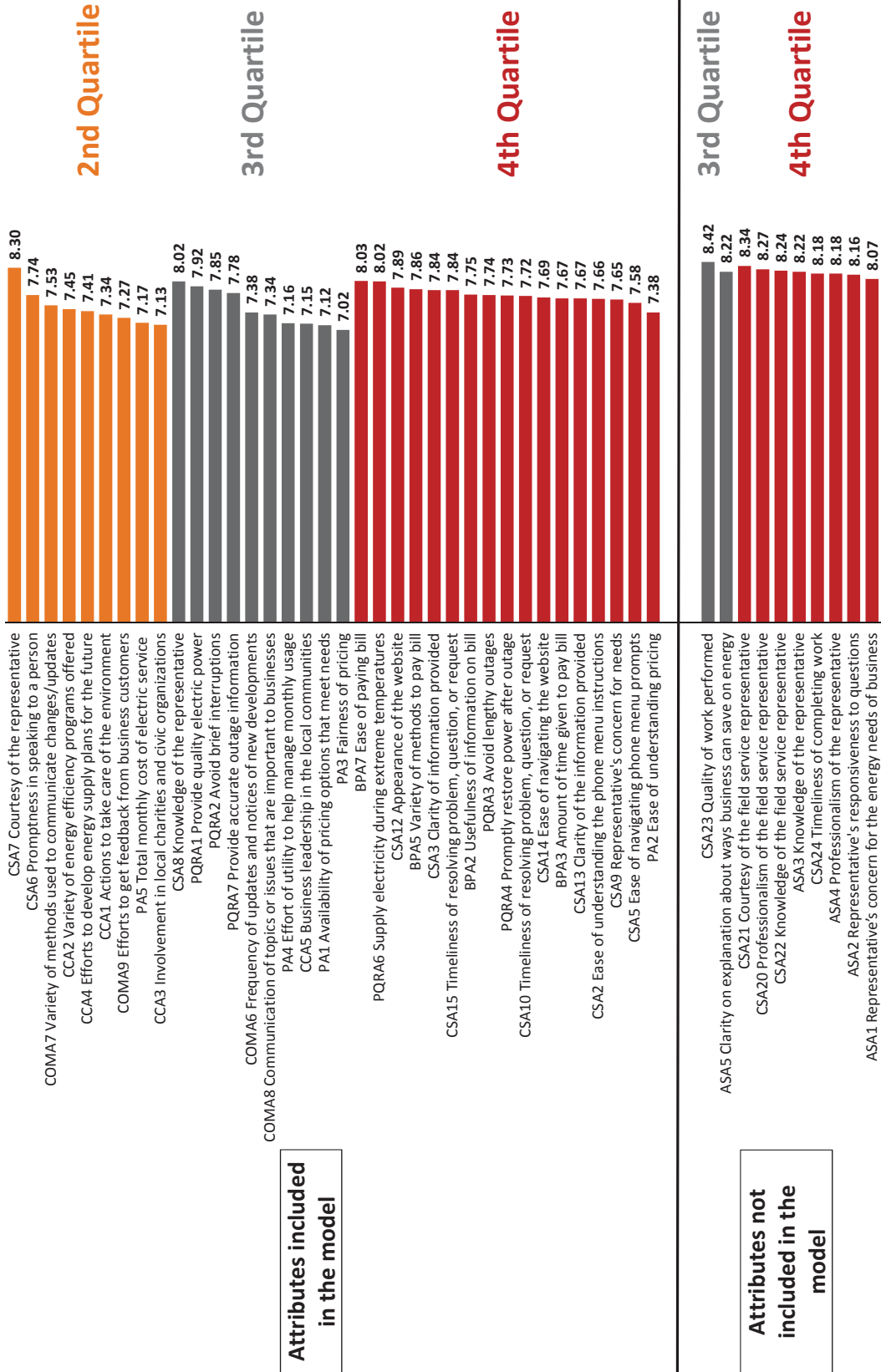
**Factor Gap Analysis<sup>1</sup>**



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<sup>1</sup>(2017 Brand Index - West Large Average) \* Factor's Importance Weight



**Attributes by Quartile**  
**Puget Sound Energy vs. National**

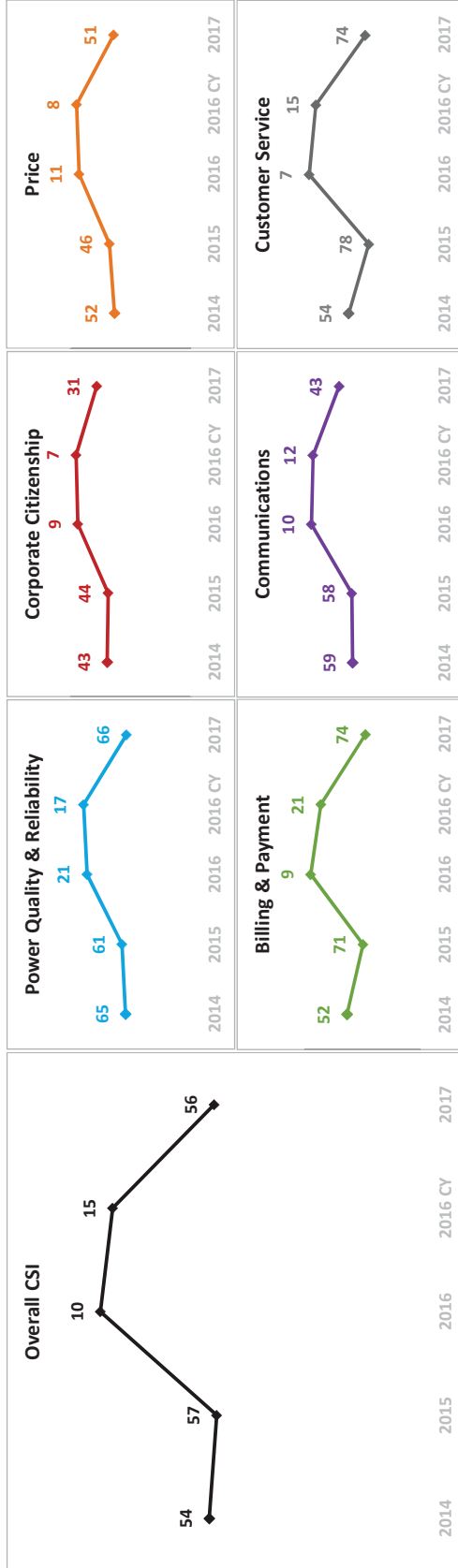


Attributes included in the model

Attributes not included in the model

This graph shows how each attribute compares to the industry.

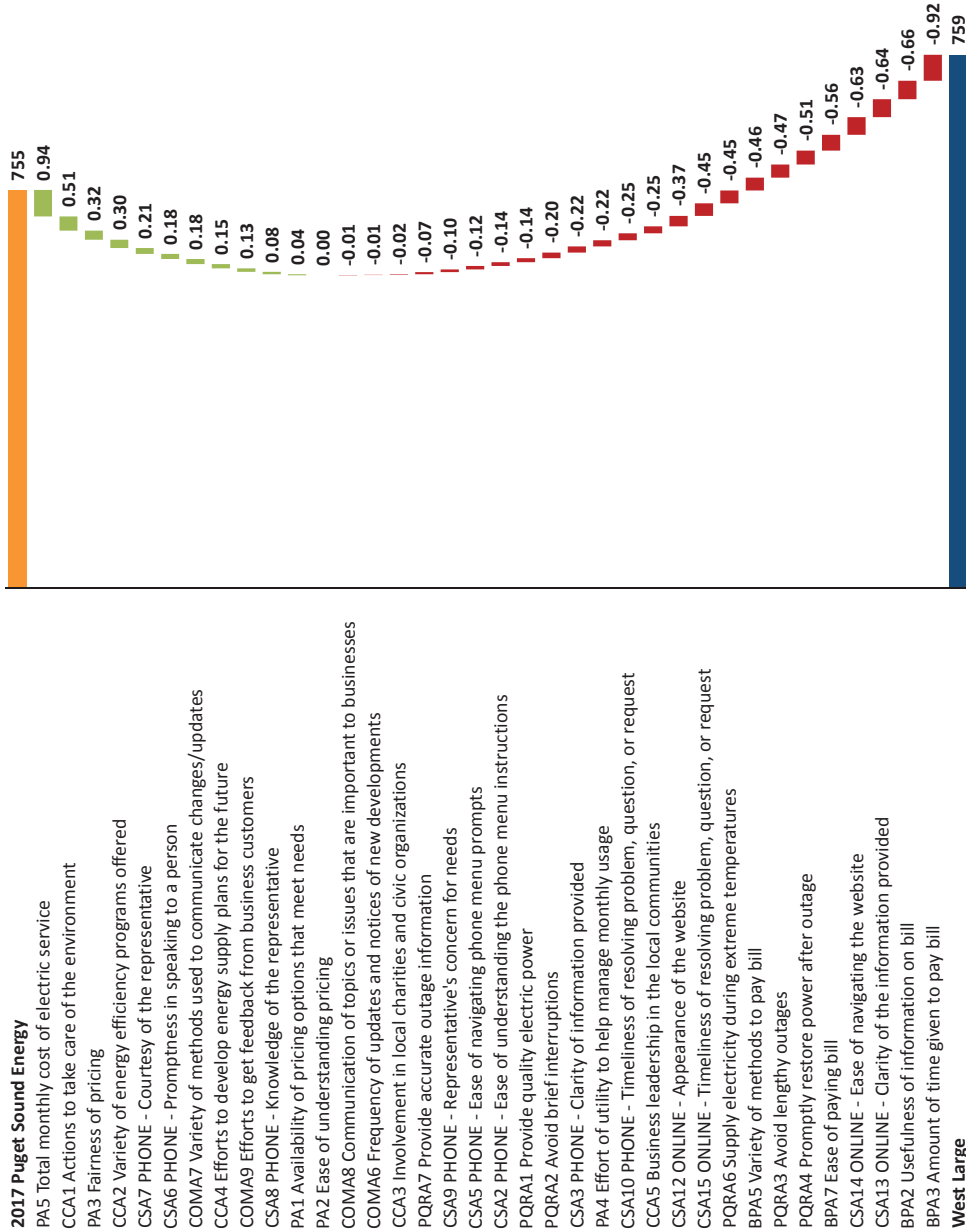
**National Factor Rank Performance  
(out of ranked brands)**



Key Management Metrics	2017	vs. 2016 CY	vs. West Large Average	West Large Rank (of 12)	vs. National Average	National Rank (of 86)
Maintain infrastructure	81%	+6.5%	+3.7%	3	+2.4%	23
Perfect power	28%	+2.6%	-2.0%	8	-0.8%	42
No outage information	7%	-1.3%	-3.2%	1	-4.4%	8
Phone first contact resolution	72%	-4.3%	+2.1%	5	+1.8%	35
Online first contact resolution	60%	-17.7%	-6.0%	11	-5.6%	65
Communications recalled	52%	-8.8%	-0.6%	7	+0.3%	38
Online account setup	66%	+2.2%	-4.9%	10	-1.0%	42
eBill	42%	-7.9%	-12.1%	12	-7.2%	72
Proactive communication	40%	-4.8%	-1.7%	8	+0.4%	27
Familiarity with energy efficiency programs	57%	-7.7%	-3.8%	9	+1.1%	26
Supports local community development	75%	+2.5%	+3.9%	4	+3.5%	27
Number of product/services aware (Avg)	5.7	0.0	0.0	4	+0.4	15



**Attribute Gap Analysis<sup>1</sup>  
Puget Sound Energy vs. West Large**

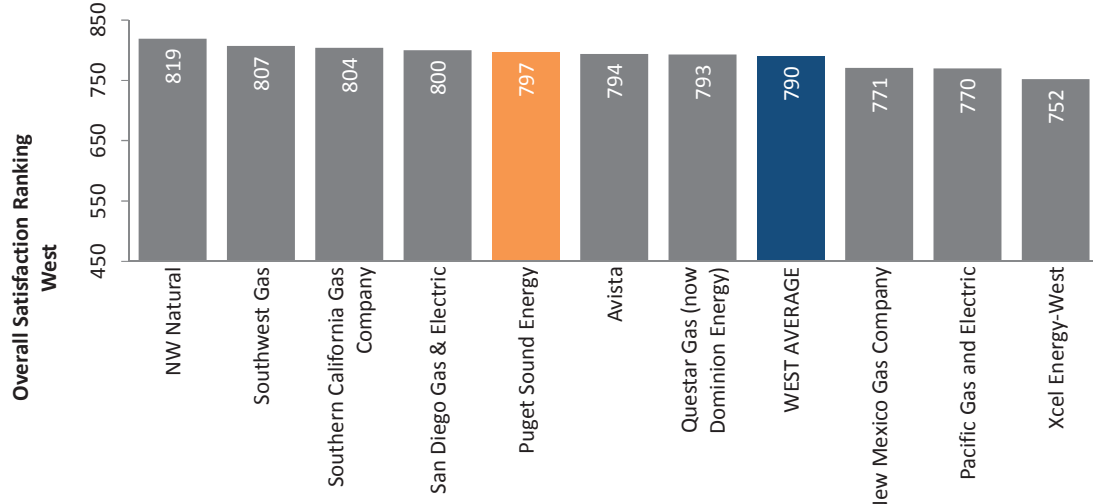


<sup>1</sup>The attribute gap analysis may not equal 100% due to rounding  
<sup>2</sup>2017 Brand Index - West Large Average) \* Factor/Attribute's Importance Weight

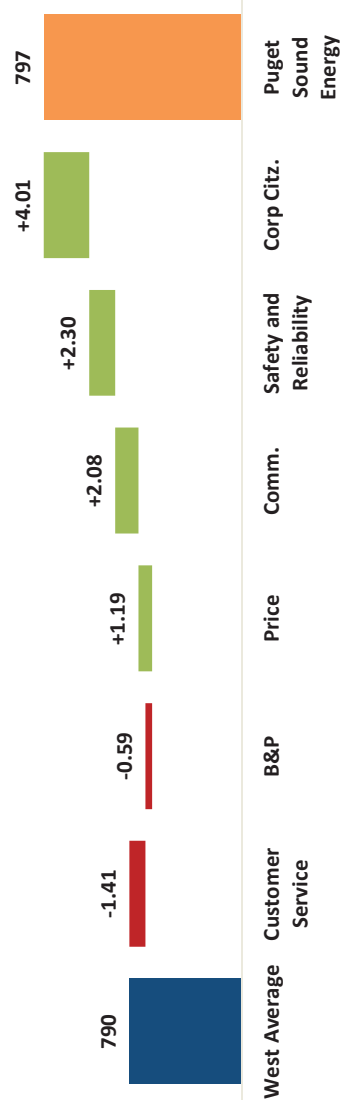


**J.D. Power**  
**Gas Business Customer Satisfaction Scorecard**  
**Puget Sound Energy - 2017**

Index Scores	2017	vs. 2016 CY	vs. West Average	West Rank (of 10)	vs. National Average	National Rank (of 56)
Overall Satisfaction	797	+5	+7	5	+5	22
<b>Factors</b>						
Safety & Reliability	831	+18	+8	4	+4	23
Billing & Payment	811	+9	-4	7	-6	36
Corporate Citizenship	765	+7	+23	3	+23	13
Customer Service	832	-10	-5	7	-11	37
Price	759	-12	+7	5	+4	25
Communications	772	-3	+14	4	+11	15

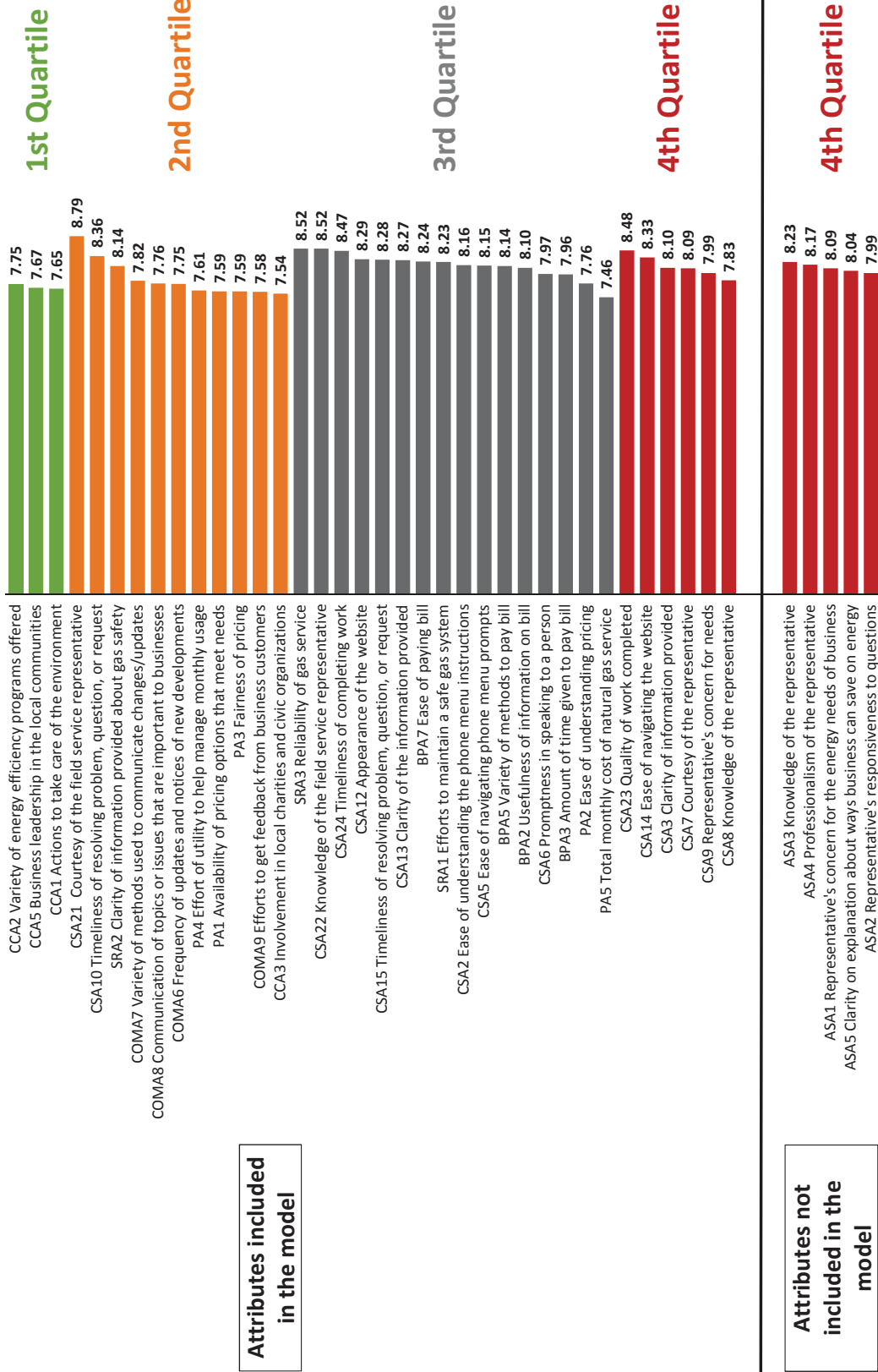


**Factor Gap Analysis<sup>1</sup>**



The factor gap analysis may not equal 100% due to rounding  
<sup>1</sup>(Brand Index - West Average) \* Factor/Attribute's Importance Weight

**Attributes by Quartile**  
**Puget Sound Energy vs. National**

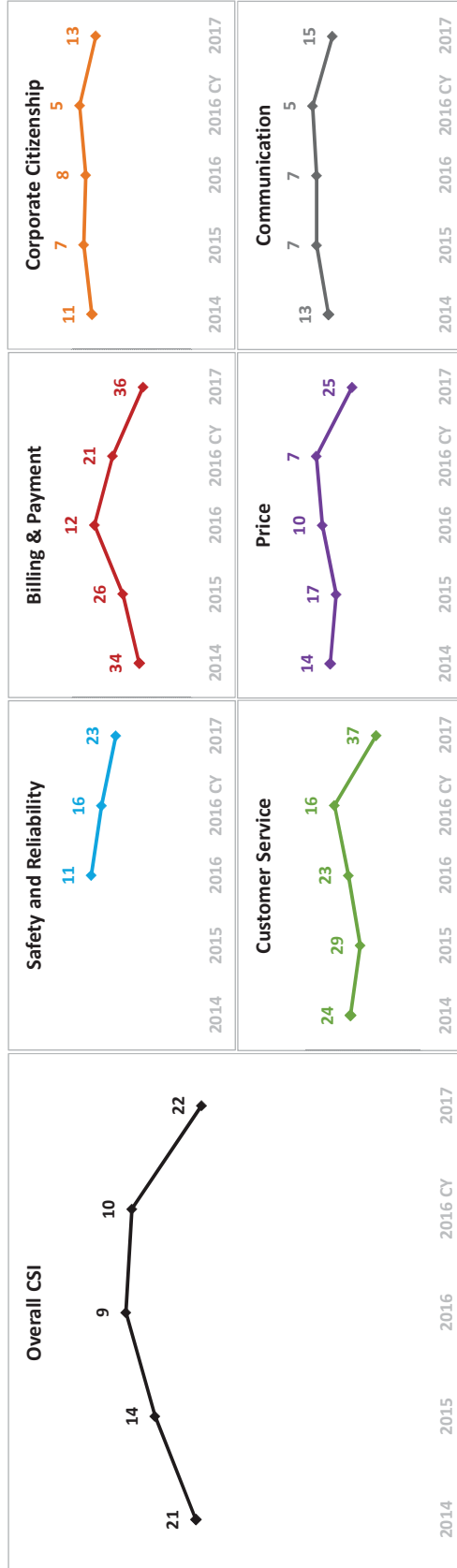


**Attributes included in the model**

**Attributes not included in the model**

This graph shows how each attribute compares to the industry.

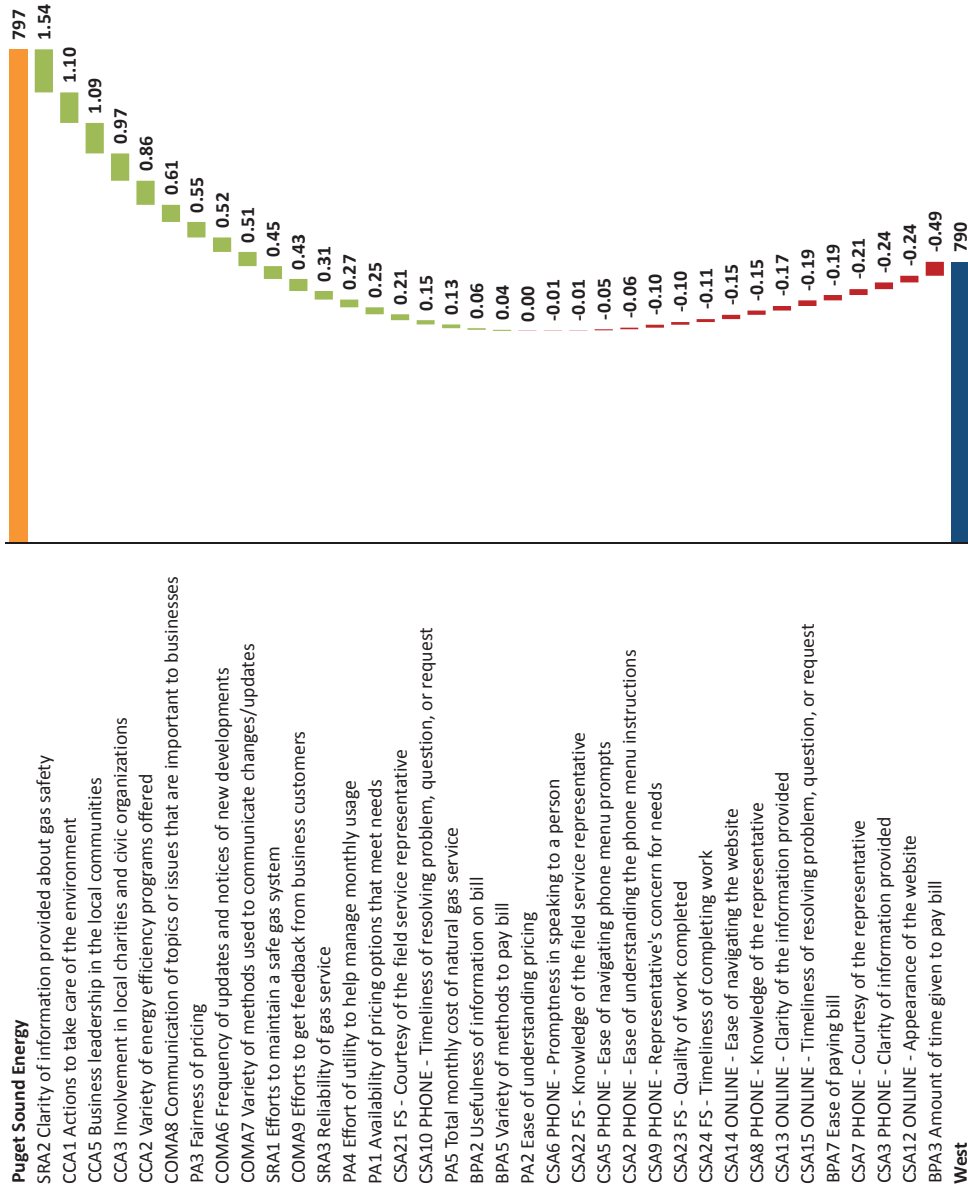
**National Factor Rank Performance  
(out of ranked brands)**



Key Management Metrics	2017	vs. 2016 CY	vs. West Average	West Rank (of 10)	vs. National Average	National Rank (of 56)
Helpful in preparing for safety issue	82%	0.0%	-0.5%	6	-0.4%	30
Conducted safety inspection	57%	-2.2%	-1.5%	6	-3.2%	38
# of communications recalled	5.2	+1.4	+0.6	2	+0.6	8
Proactive communication	48%	-3.4%	+1.8%	4	+2.4%	17
Online account setup	71%	+0.7%	+0.2%	5	+3.3%	12
eBill	56%	-1.7%	+0.6%	6	+3.3%	14
Familiar with energy efficiency	66%	-7.5%	-2.0%	4	+6.1%	8
Supports local community development	74%	-4.2%	+2.1%	4	+2.2%	25
Phone first contact resolution	59%	-7.2%	-3.5%	7	-7.6%	47
Online first contact resolution	63%	+1.3%	-1.4%	6	-2.5%	36
# of products/services aware of	5.2	-0.7	+0.1	5	+0.1	18
# of products/services used	1.3	NA	+0.1	2	0.0	14



Attribute Gap Analysis<sup>1</sup>  
Puget Sound Energy vs. West

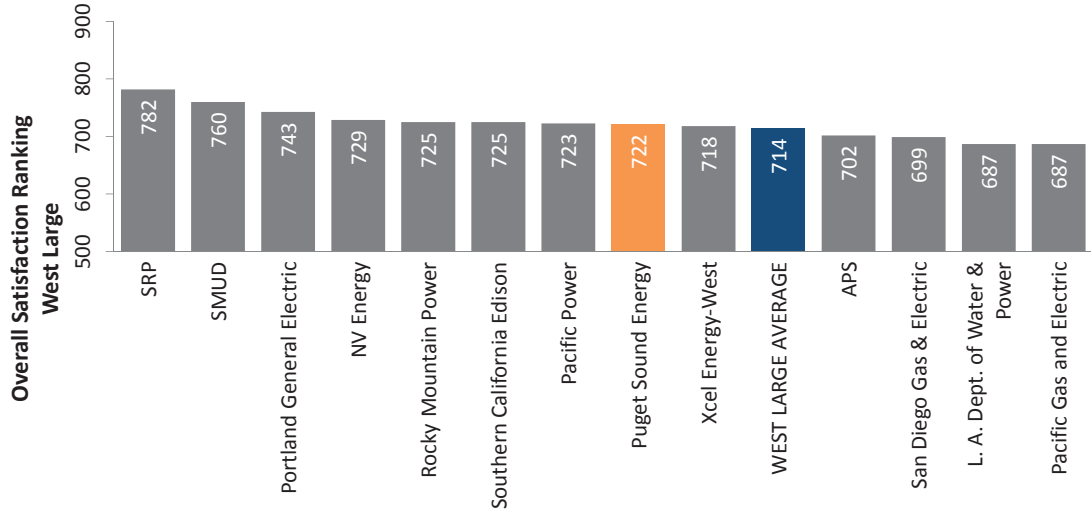


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<sup>2</sup>(Brand Index - West Average) \* Factor/Attribute's Importance Weight

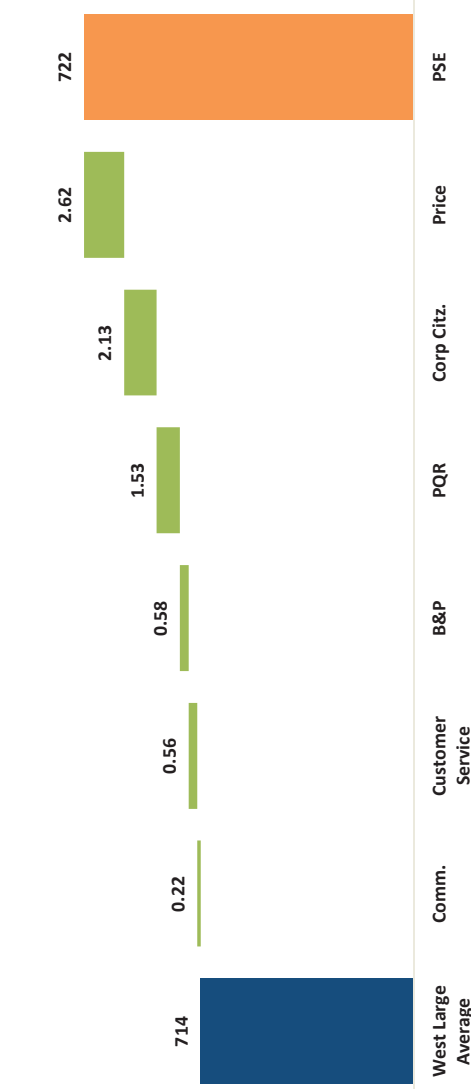
**J.D. Power**  
**Electric Residential Customer Satisfaction Scorecard**  
**Puget Sound Energy - 2018**

Index Scores	2018	vs. 2017	vs. West Large Average	West Large Rank (of 13)	vs. Large Average	Large Rank (of 58)	vs. National Average	National Rank (of 138)
Overall Satisfaction	722	+13	+8	8	+2	30	+2	75
<b>Factors</b>								
Power Quality & Reliability	768	+14	+5	9	0	33	-2	89
Price	656	+12	+14	8	+3	30	+2	73
Billing & Payment	783	+14	+3	7	0	31	0	78
Corporate Citizenship	675	+13	+14	4	+13	14	+13	47
Communications	669	+9	+2	5	-5	30	-3	68
Customer Service	792	+30	+10	7	+12	18	+12	52

Rank Quartile: ● 1st ● 2nd ● 3rd ● 4th

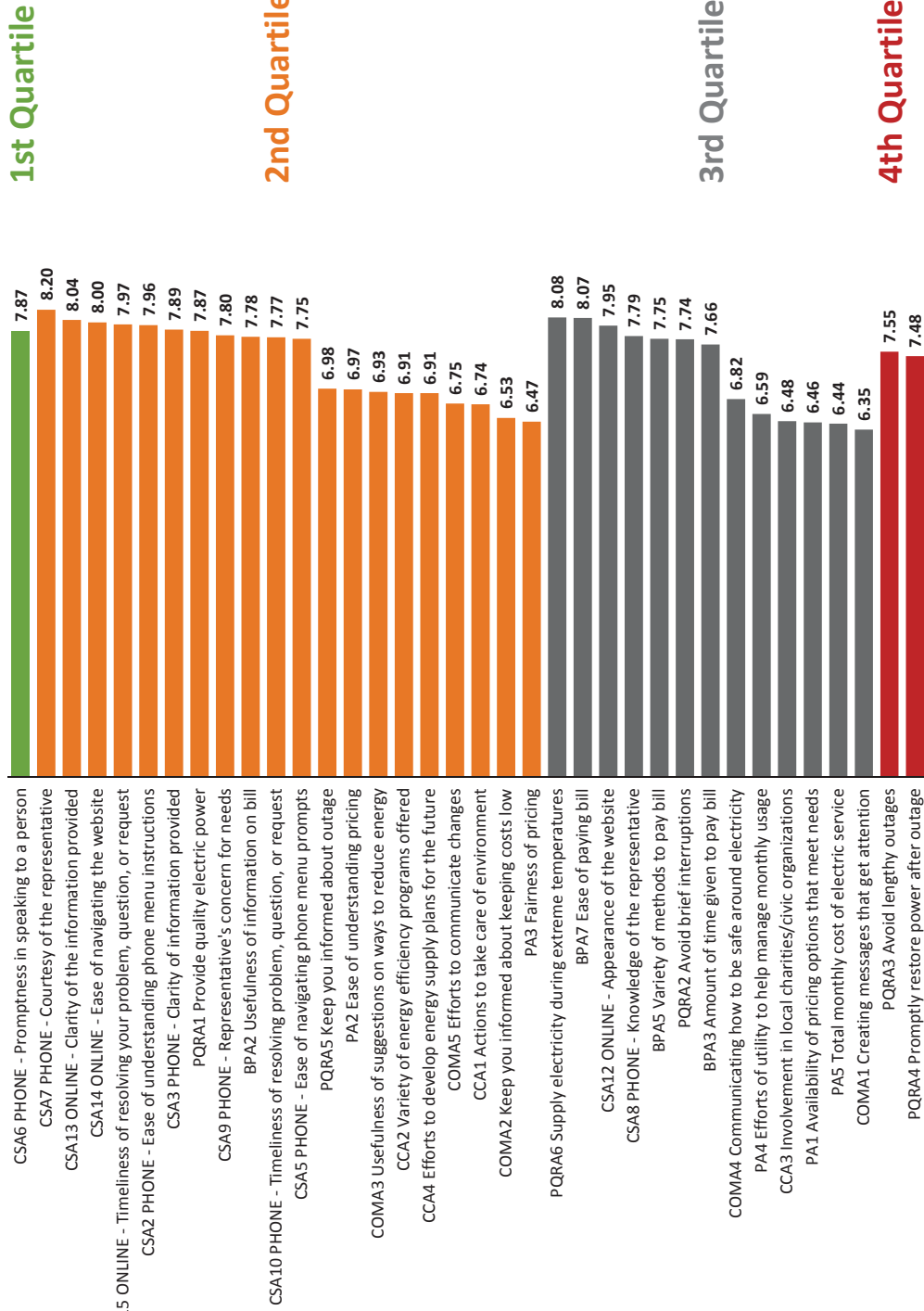


**Factor Gap Analysis<sup>1</sup>**



The factor gap analysis may not equal 100% due to rounding.  
<sup>1</sup>(2018 Brand Index - 2018 West Large Average) \* Factor's Importance Weight

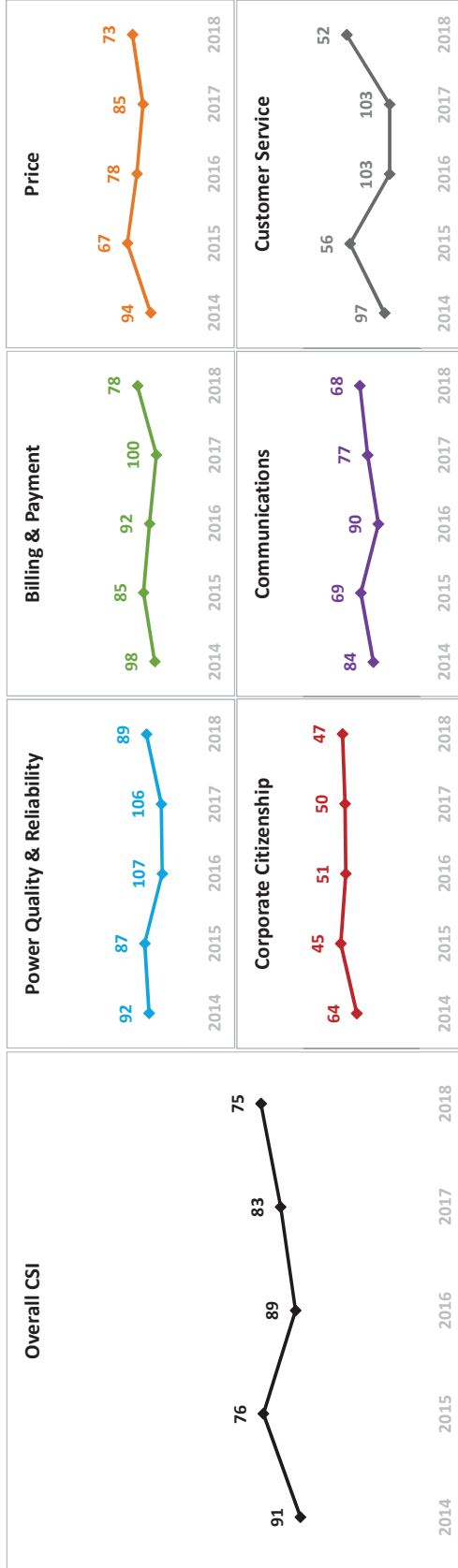
Attributes by Quartile  
Puget Sound Energy vs. National



This graph shows how each attribute compares to the industry.



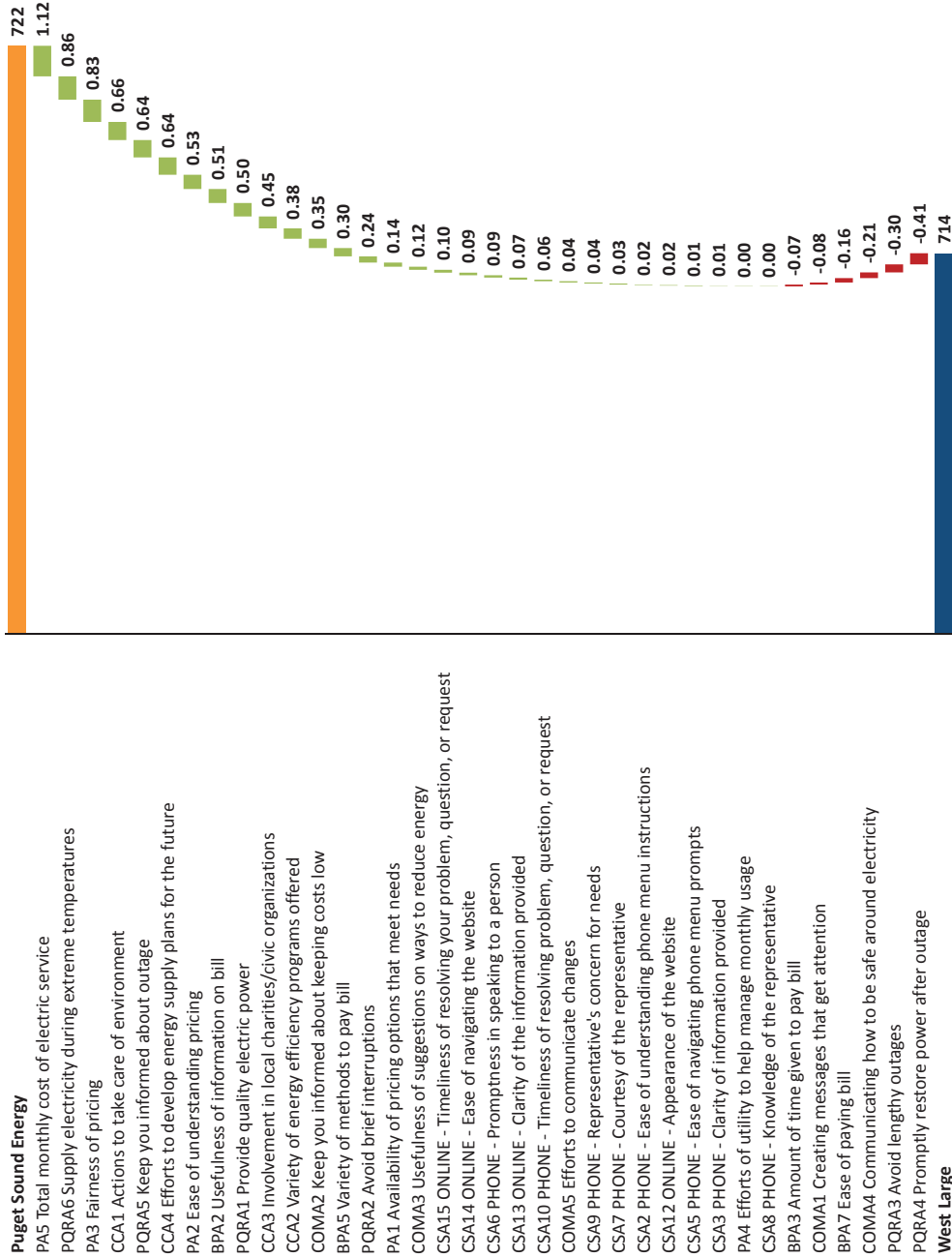
**National Factor Rank Performance  
(out of ranked brands)**



Key Management Metrics	2018	vs. 2017	vs. West Large Average	West Large Rank (of 13)	vs. Large Average	Large Rank (of 58)	vs. National Average	National Rank (of 138)
# of brief interruptions	0.8	-0.3	0.0	7	-0.3	13	-0.3	31
# of lengthy outages	0.6	-0.1	0.0	9	0.0	36	0.0	86
Outage points of information	2.6	+0.1	+0.2	3	+0.3	8	+0.3	11
% recall communication	45%	+1.7%	+1.1%	5	+1.6%	25	+1.3%	68
% recall negative media	3%	-0.8%	-6.5%	6	-4.1%	19	-3.6%	60
Online first contact resolution	75%	+12.0%	+7.1%	3	+8.9%	6	+8.5%	15
Phone first contact resolution	71%	+2.3%	+3.3%	6	+1.9%	28	+1.4%	72
% provided same info 2+ times	24%	-5.3%	-8.5%	3	-6.8%	10	-6.2%	39
% eBill	43%	+2.0%	-1.5%	10	+2.1%	22	+3.2%	36
Average bill amount	\$125	-\$11	+\$1	8	-\$9	20	-\$11	41
Familiarity with energy efficiency programs	47%	0.0%	-4.1%	8	+1.8%	18	+2.5%	37
Supports development of local community	69%	+2.1%	+4.7%	7	+3.8%	23	+2.5%	79



**Attribute Gap Analysis<sup>1</sup>**  
**Puget Sound Energy vs. West Large**



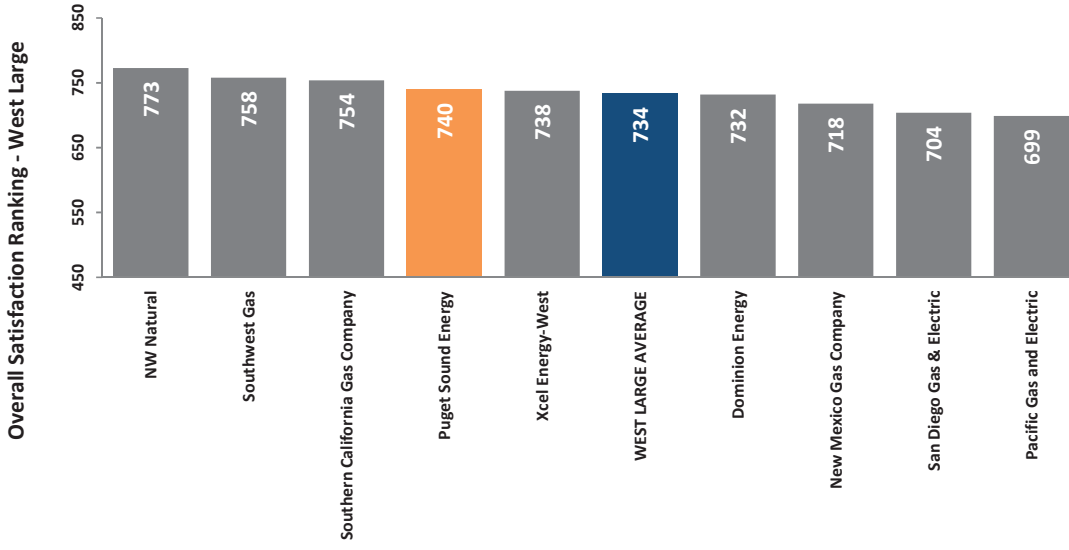
<sup>1</sup>The attribute gap analysis may not equal 100% due to rounding  
<sup>2</sup>2018 Brand Index - 2018 West Large Average \* Factor/Attribute's Importance Weight

**J.D. Power**  
**Gas Residential Customer Satisfaction Scorecard**  
**Puget Sound Energy - 2018**

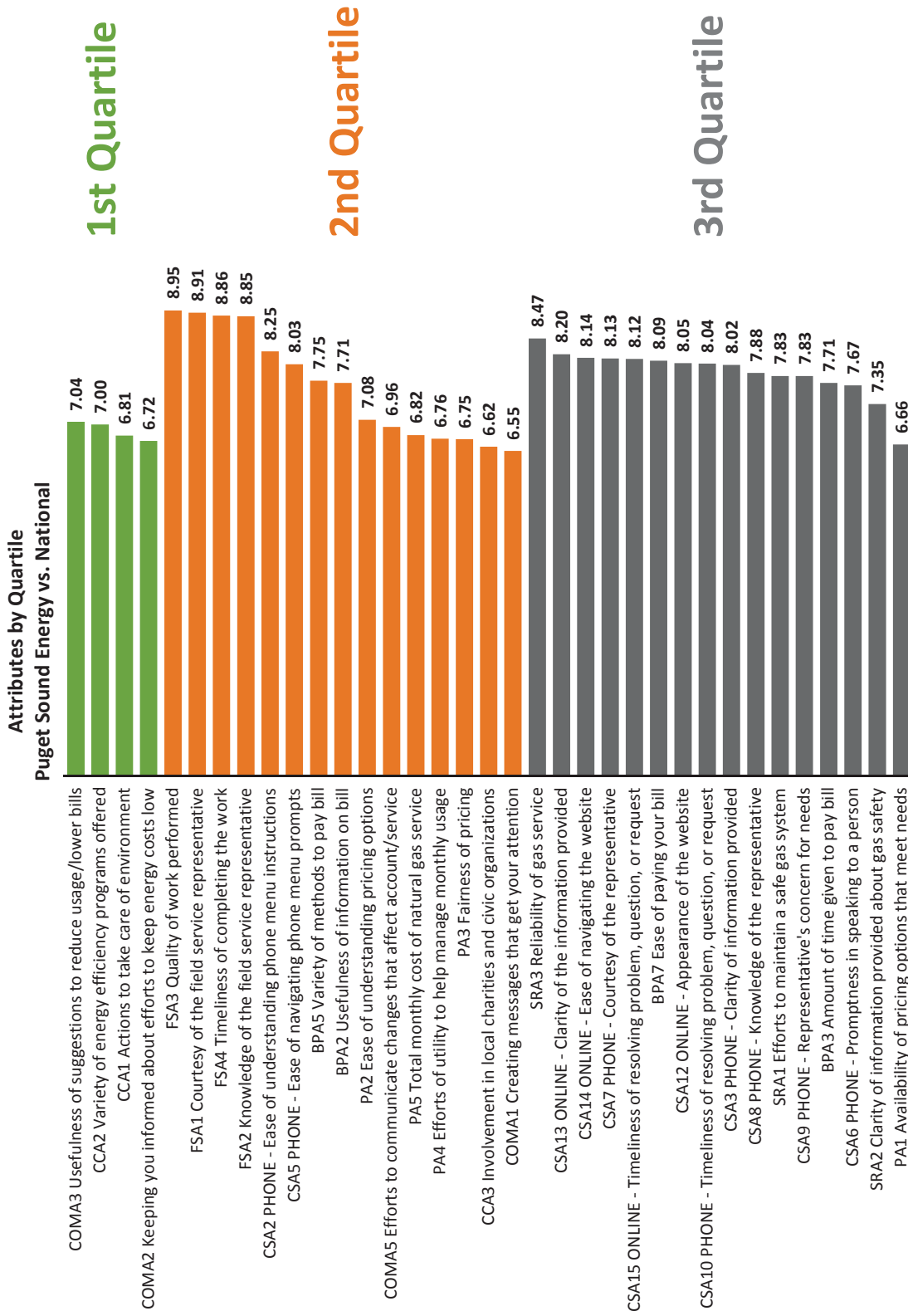
Index Scores	2018	vs. 2017	vs. West Large Average	West Large Rank (of 9)	vs. Industry Average	Industry Rank (of 84)
Overall Satisfaction	740	+6	+6	4	+3	30
<b>Factors</b>						
Safety and Reliability	792	+7	+10	4	0	41
Billing & Payment	783	+8	+2	4	-1	42
Price	682	+5	-5	6	-1	38
Corporate Citizenship	681	-1	+17	2	+19	14
Communications	683	+9	+12	3	+13	19
Customer Service	814	-5	-17	6	-9	48



### Factor Gap Analysis<sup>1</sup>

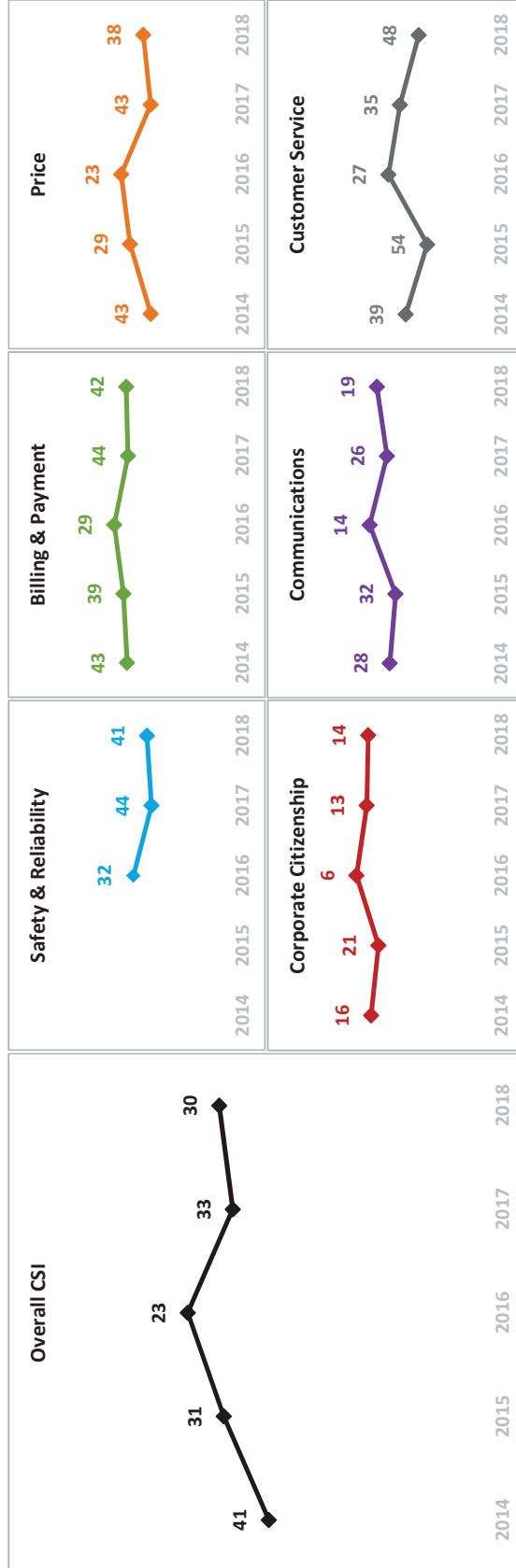


<sup>1</sup>The factor gap analysis may not equal 100% due to rounding (2018 Brand Index - 2018 West Large Average) \* Factor's Importance Weight



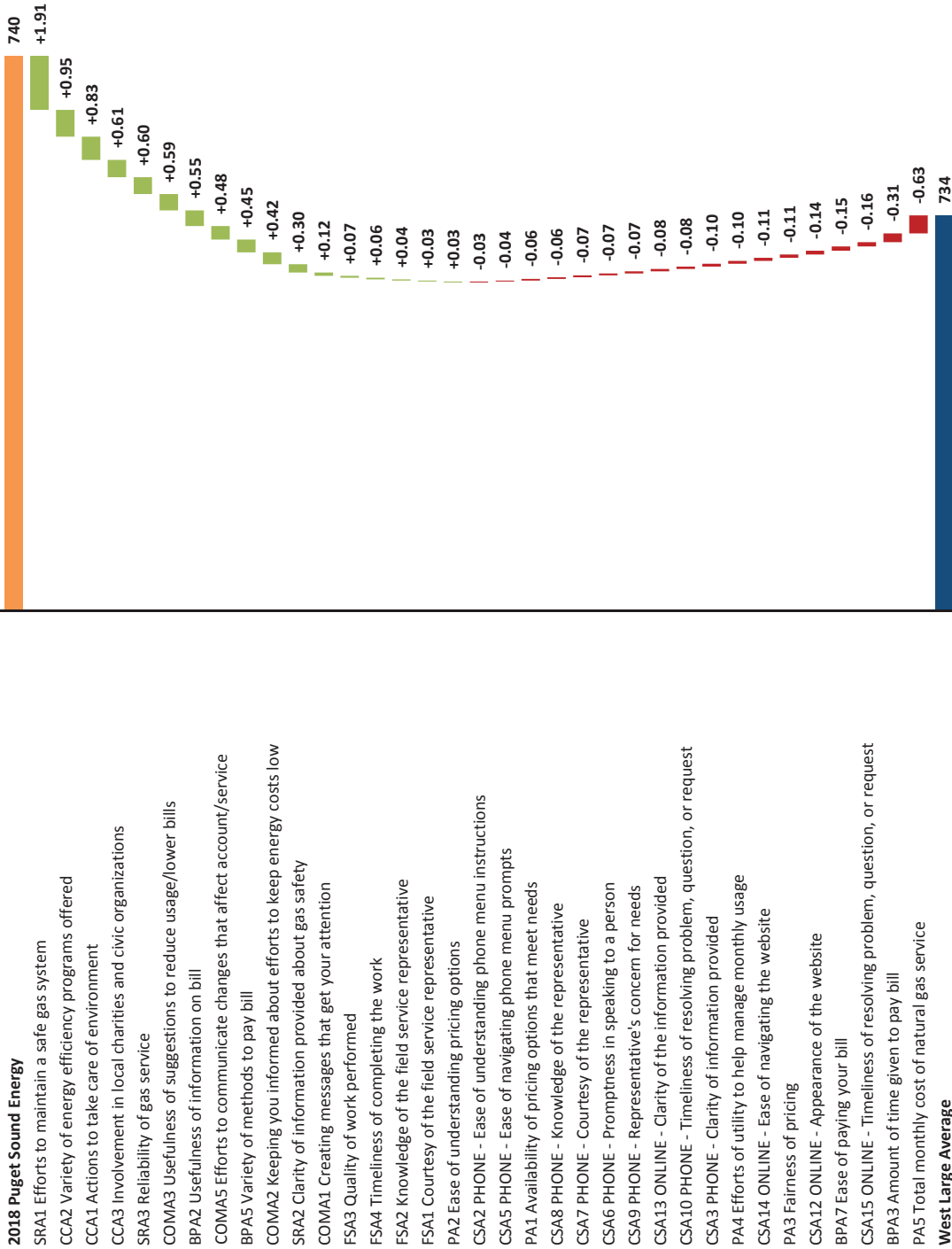
This graph shows how each attribute compares to the industry.

## National Factor Rank Performance (out of ranked brands)



Key Management Metrics	2018	vs. 2017	vs. West Large Average	West Large Rank (of 9)	vs. Industry Average	Industry Rank (of 84)
% Helpful with gas safety	69%	-4.0%	0.0%	3	-1.0%	43
Number of communications recalled	2.7	+0.1	-0.1	7	-0.1	34
% recall utility communication	48%	-1%	+6%	1	+5%	23
Phone first contact resolution	72%	+5.3%	-0.3%	6	-0.2%	48
Online first contact resolution	70%	-0.2%	-1.6%	4	-2.0%	47
% online account setup	61%	+1%	-1%	5	+2%	29
% eBill	49%	+3.1%	+0.2%	4	+5.2%	19
Average bill amount	\$101	+\$4	+\$44	9	+\$23	66
% familiar with energy efficiency or conservation programs	42%	-0.3%	+3.4%	1	+7.2%	6
% supports local community development	71%	-0.9%	+8.4%	3	+7.3%	20
% recall employee volunteering	18%	-1.7%	+3.7%	3	+3.4%	22
% aware of local donations and support	17%	-1.4%	+2.9%	5	+2.2%	31



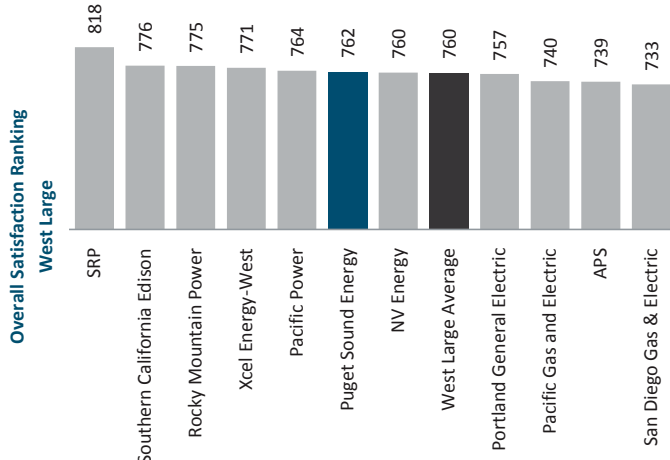
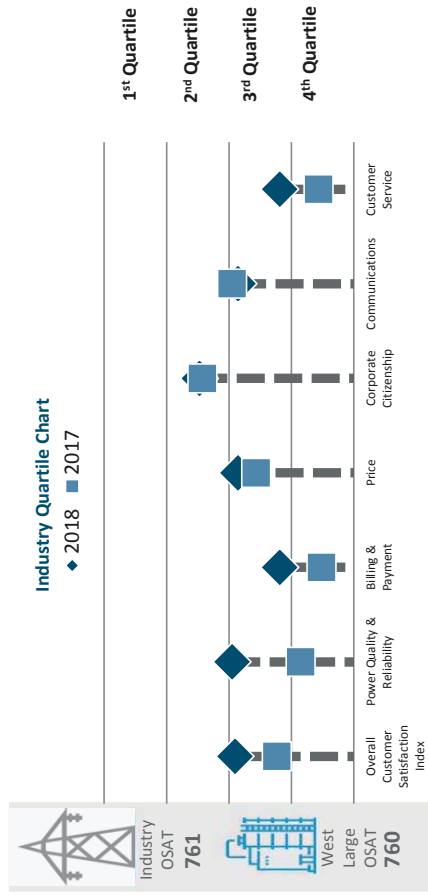


The attribute gap analysis may not equal 100% due to rounding  
 \*(2018 Brand Index - West Large Average) \* Factor/Attribute's Importance Weight

**J.D. Power**  
**Electric Utility Business Satisfaction Study**  
**Puget Sound Energy - 2018**



2018 Electric Utility Business Satisfaction Study<sup>SM</sup>  
Puget Sound Energy



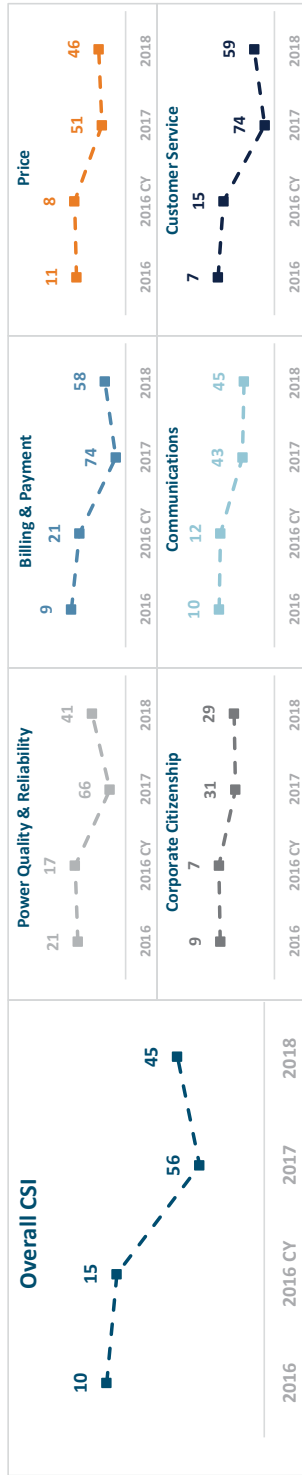
Note: Differences are based off 2018 versus 2017.

**J.D. POWER**

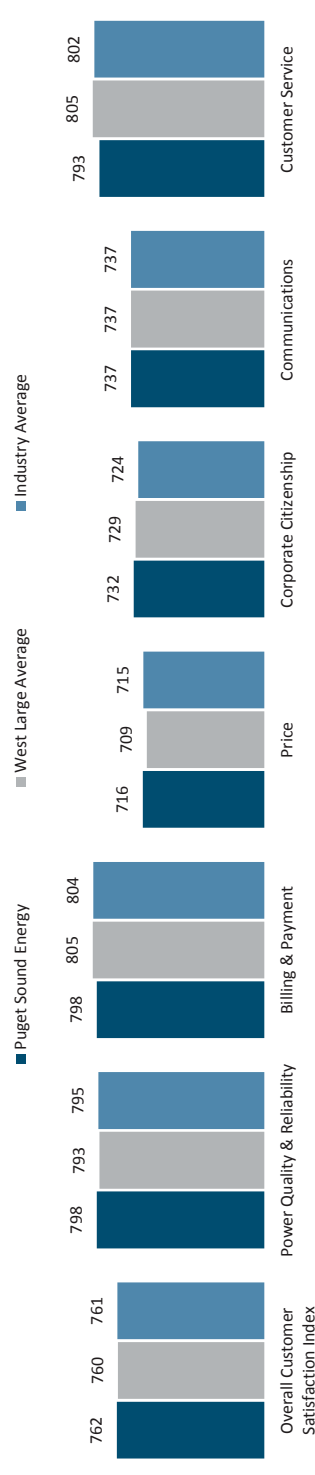
2018 Electric Utility Business Satisfaction Study<sup>SM</sup>  
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Puget Sound Energy

National Factor Rank



2018 Factor Scores



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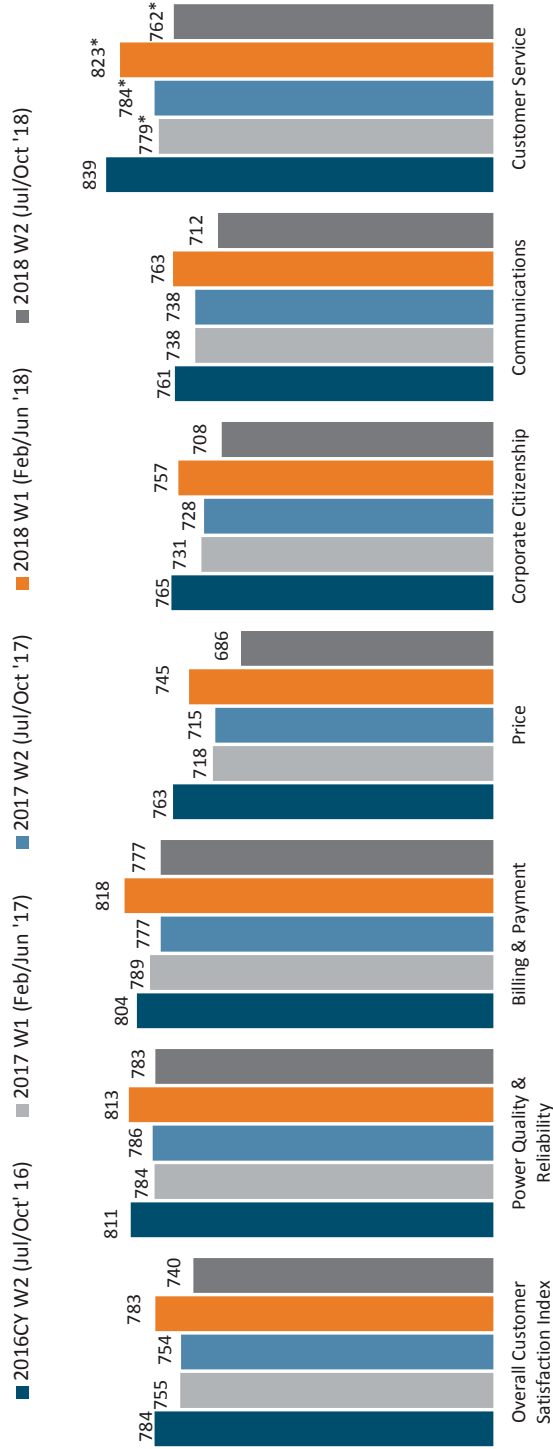
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### Attributes by Quartile – Puget Sound Energy vs. National Average



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### Overall CSI and Factor Performance – Trailing Five Waves



Note: \* Small sample size (n=30-99).

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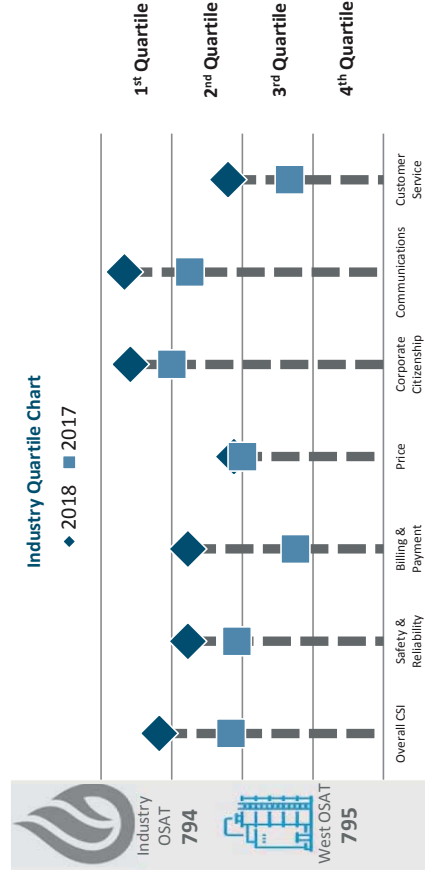
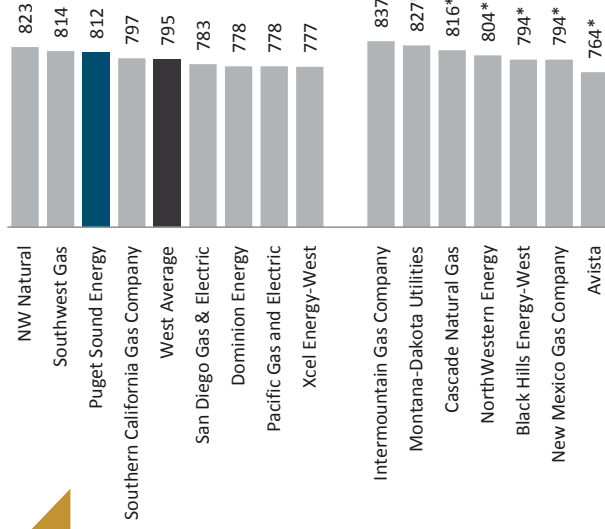
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Overall Satisfaction Ranking West

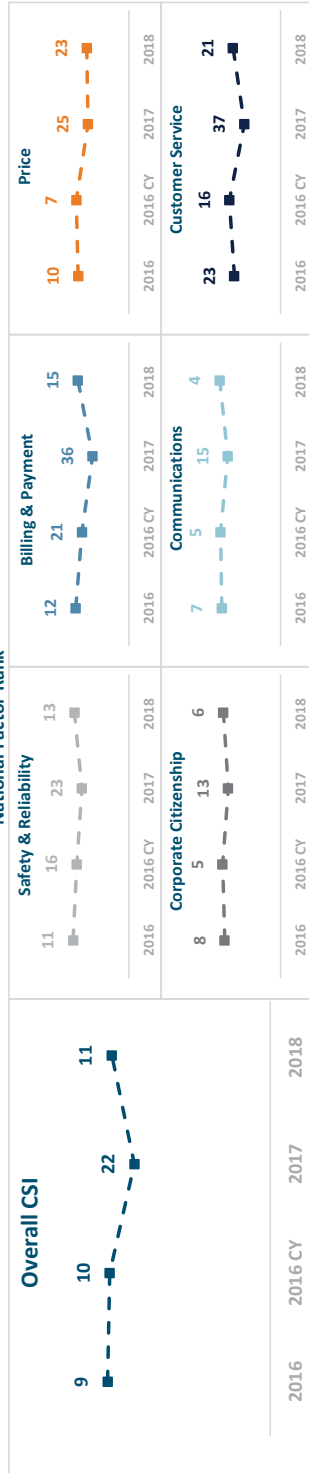


Notes: \*Small sample size (n=30-99); Differences are based off 2018 versus 2017.

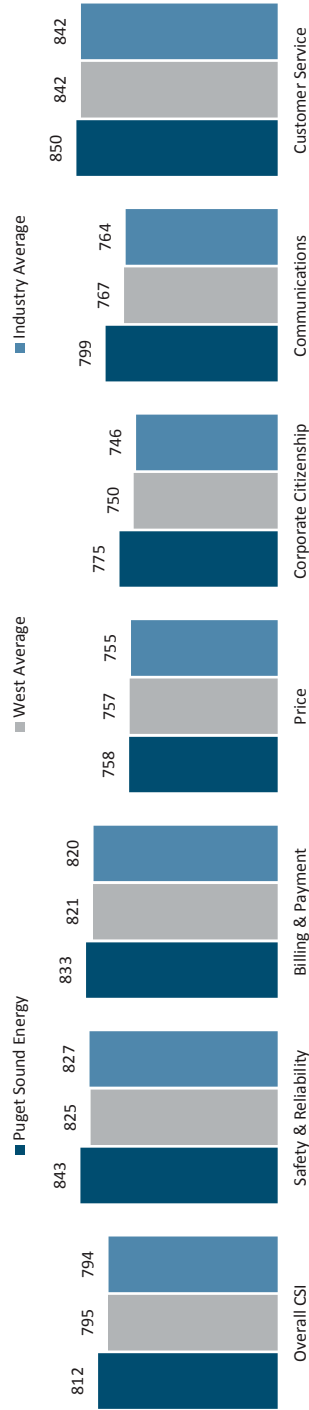
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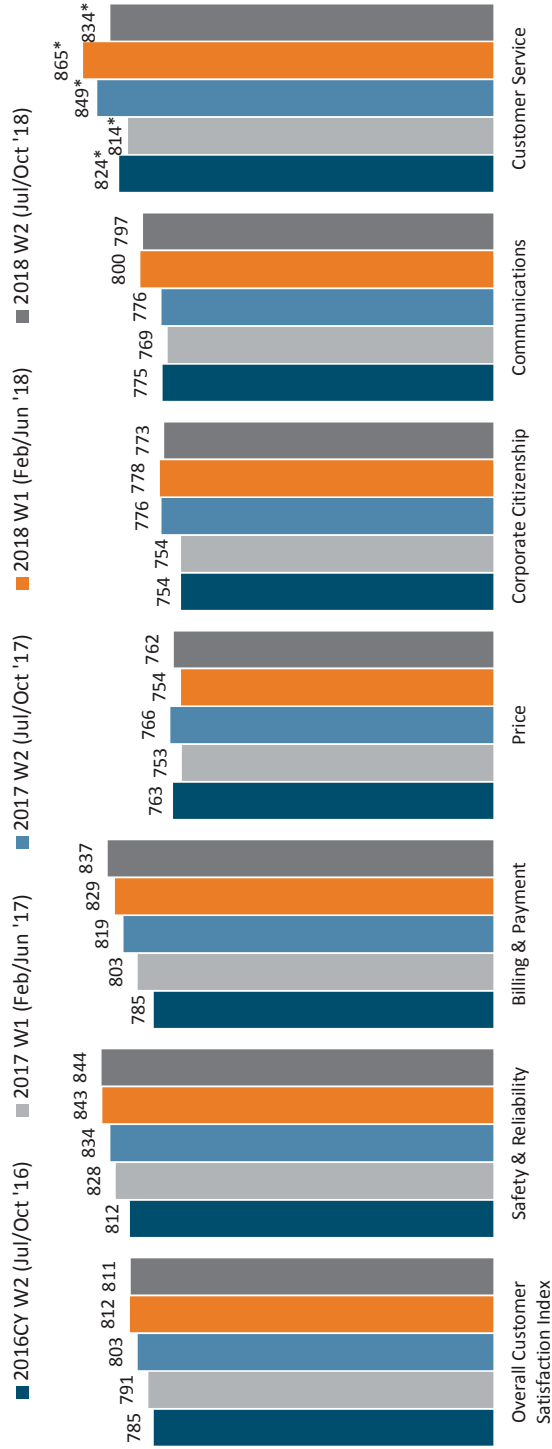
**Attributes by Quartile – Puget Sound Energy vs. National Average**



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### Overall CSI and Factor Performance – Trailing Five Waves



Note: \* Small sample size (n=30-99).

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