

Strategic Plan Implementation: Funding Utility Infrastructure for Growth

July 19, 2021

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Why We're Here Today

- Growth and Economic Development strategic plan item review
 - Overview of staff/consultant efforts on growth funding
- Water/Wastewater strategic plan item review

No decision required today, feedback appreciated

Strategic Plan Implementation Item



Growth (wholesale/retail sales) and Economic Development

- We will maintain our policy for line extensions (paid for the requestor). We will consider developing a policy for assessing a standardized proportional share of infrastructure needs (substations/transmission) as part of line extension costs.

Funding Infrastructure for Growth

Historic infrastructure funding options:

1. Retail rate increases
2. Developer funded

New industry approach:

Consider addressing growth using a similar approach to Mason PUD No. 3's System Impact Fee

New Electric Industry Approach

- Develop a fee for new electric connections that shares the cost of substation and related infrastructure
- Consistent with existing Board policy that “growth pays for growth”
- Staff worked with consultants to understand cost basis

Our Growth Planning Assumptions

- 7(+) stations in 5 years for normal growth
 - Ohme, Chelan, Leavenworth, Wenatchee, Malaga, Cashmere, Entiat
 - Additional development efforts underway, such as West Wenatchee
- Historically 20% reserved for reliability
- Over \$15 million per year forecasted cost

Study Results

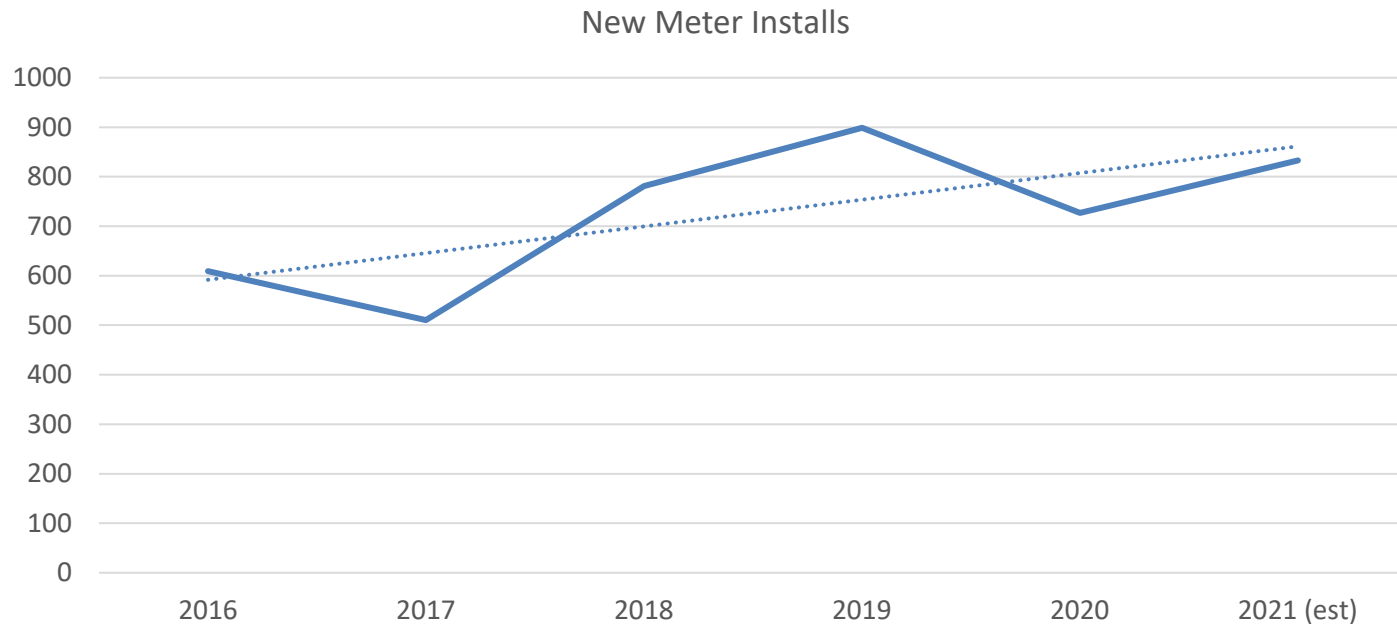
- Average cost of substations and related infrastructure:

Average total cost	\$305 / kW
Less 20% reserved	<u>(\$61 / kW)</u>
Total growth capacity cost	\$244 / kW
Less costs included in COSA (residential)	<u>(\$217 / kW)</u>
Adjusted capacity cost (marginal cost)	\$27 / kW

- Equivalent to ~\$1,300 for a 400 A residential service
- Can be further adjusted for load diversity, changed reliability reservation, economic development, etc.

Estimated Electric System Impact

- Approximately \$1 million revenue/year at historic growth rates



Strategic Plan Implementation Item



Water/Wastewater

- Chelan PUD water rates will strongly lean towards self-sustainability, with annual rate increases of around 4% planned between 2020-2024.
- The wastewater rate structure will lean towards self-sustainability, with annual rate increases of around 4% planned between 2020-2024,

Note: Adopted water rate plans assumed \$1,000 increases in water/wastewater System Development Charges (SDC) as an additional self-sustainability approach

Water/Wastewater Growth Funding

- Consultant study of existing SDCs shows existing charges are well below cost
- Depending on number of new connections, additional fees could reduce future rate pressure
- May consider additional increases in future as part of future rate plans

Water/Wastewater Study Results

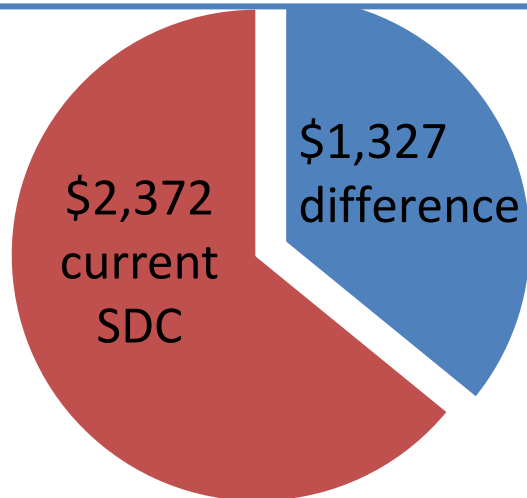
Consultant study results include opportunity cost which staff recommends excluding from the cost recovery target

Water Total Cost

\$5,606 per 5/8" connection

Staff Recommended Target

\$3,700 per 5/8" connection

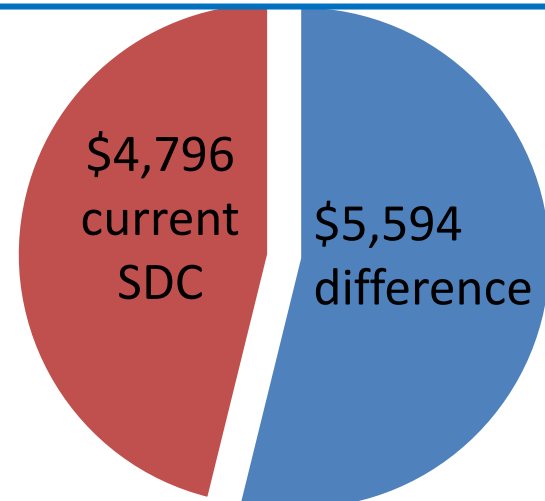


Wastewater Total Cost

\$16,410 per residential equiv.

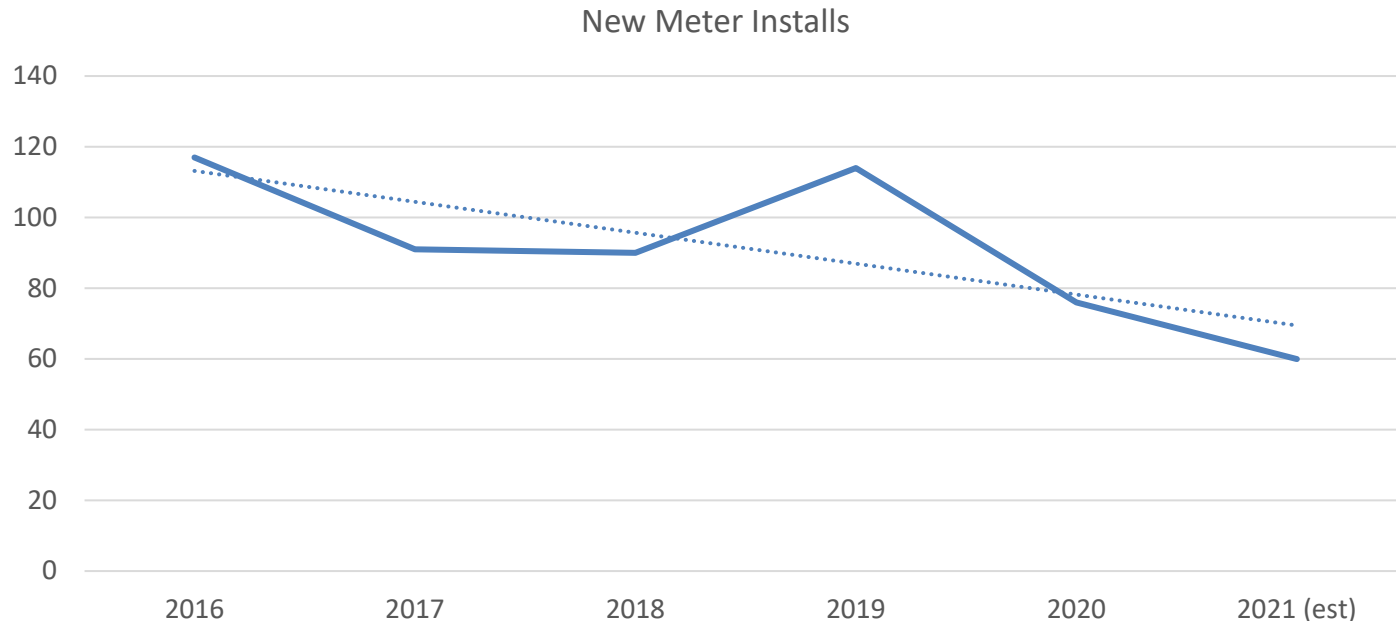
Staff Recommended Target

\$10,390 per residential equiv.



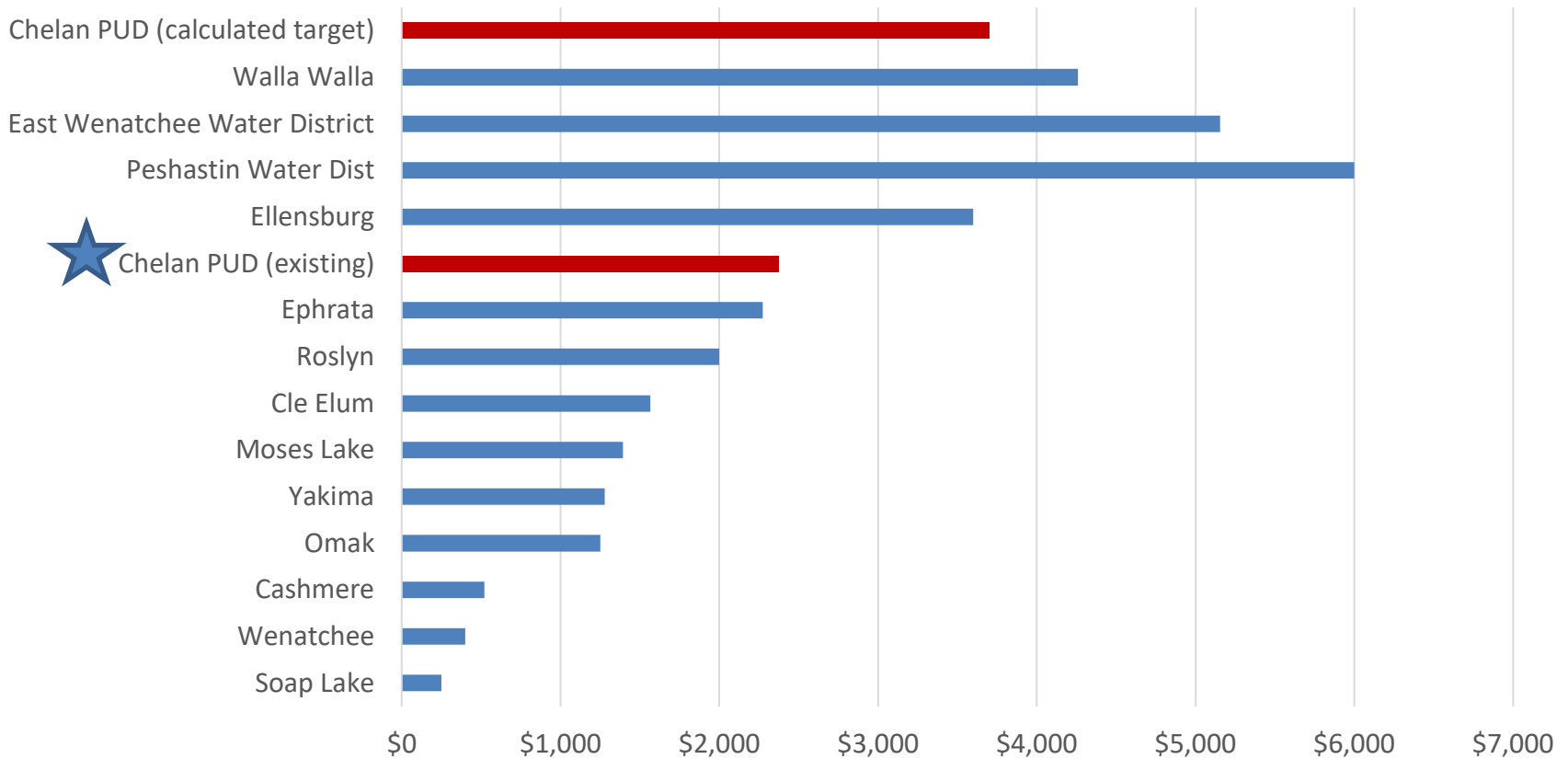
Estimated Water System Impact

- An increase of \$1,000 per connection would result in \$100,000 revenue for 100 connections (approx. 1.5% rate equivalent)



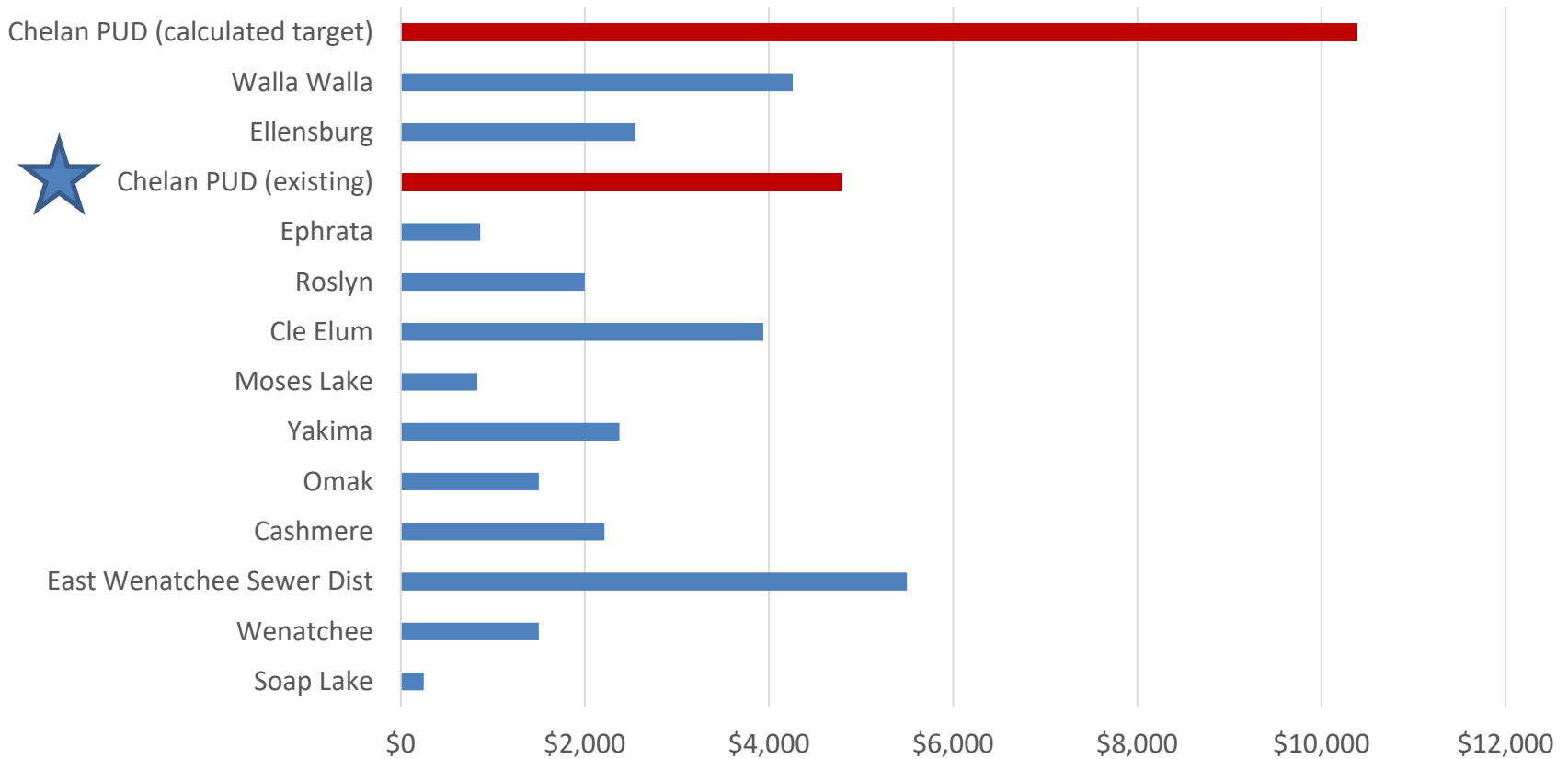
Water SDC Comparison

Water SDC Rate Survey (Single Family)



Wastewater SDC Comparison

Wastewater SDC Rate Survey (Single Family)



Next Steps

- Immediate: Incorporate Board feedback
- Summer: Outreach to building and development community
- Fall: Board update and potential action

APPENDICES

Proposed Water SDC Adjustment by Connection Size

Meter Size	Calculated Cost	Current Fee	Fee with +\$1,000/ERU	Adjustment
5/8"	\$5,606	\$2,372	\$3,372	\$1,000
1"	\$14,015	\$5,930	\$8,430	\$2,500
1 ½"	\$28,030	\$11,859	\$16,860	\$5,001
2"	\$44,848	\$18,975	\$26,976	\$8,001
3"	\$84,090	\$35,580	\$50,580	\$15,000
4"	\$140,150	\$59,300	\$84,300	\$25,000
6"	\$280,300	\$118,600	\$168,600	\$50,000
8"	\$448,481	\$189,760	\$269,760	\$80,000
10"	\$644,691	\$272,780	\$387,780	\$115,000

Wastewater SDC Board Options

	Calculated Cost	Current	Fee with +\$1,000/ERU
Per ERU	\$16,410	\$4,796	\$5,796

Migrate SDCs to be assessed in a post-stamp approach,
consistent with rates

Water, wastewater fee history

1990's

- Minor adjustments occur attempting to align with cost increases and new connections

2001

- Temporary suspension of SDCs
- Intended to encourage growth

2008

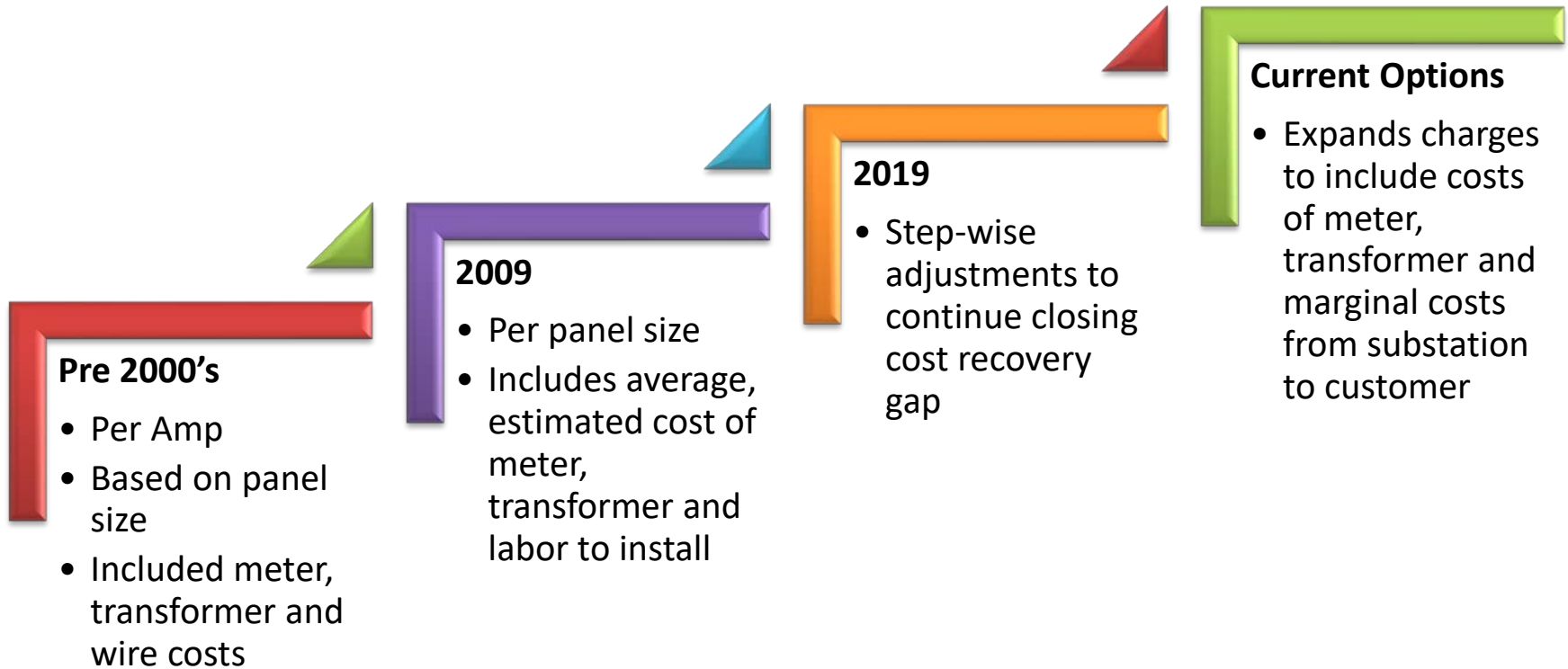
- Reinstatement of SDC amounts in place today

Electric Service Connection Fees

Service Rating	Single Phase		Three Phase 208V		Three Phase 480V	
	Current Fee	With Additional	Current Fee	With Additional	Current Fee	With Additional
1-100A	\$1,100	\$1,424	\$2,100	\$2,661	\$2,600	\$3,895
101-200A	\$1,900	\$2,548	\$4,100	\$5,222	\$5,500	\$8,090
201-400A	\$2,800	\$4,095	\$8,300	\$10,545	\$9,000	\$14,180
401-600A	\$4,700	\$6,643	\$11,100	\$14,467	\$13,500	\$21,270
601-800A	\$5,700	\$8,290	\$12,200	\$16,689	\$17,800	\$28,160
801-1000A	\$5,900	+\$27/kW	\$15,300	+\$27/kW	\$20,300	+\$27/kW

Fee would be combined with existing Service Connection Fees which include average, estimated costs of transformer, meter and labor to install

Electric Service Connection Fee History



400 Amp, single phase fee adjustment history

\$2,360	\$2,300	\$2,800	\$4,095
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