

# Capacity Rates & Diversity Factors

April 2026

## Q: What Are Capacity Charges?

When you connect to Top Energy's electricity network, you pay for the infrastructure capacity needed to supply power to your property. These charges cover the cost of network equipment sized to meet your peak electricity demand.

The rates below show the cost per kilovolt-ampere (kVA) of connection capacity at each level of our network. Because not all customers use their maximum capacity at the same time, we apply **diversity factors** - discounts that reflect realistic usage patterns.

Network Level	Diversity Factor (Residential)	Diversity Factor (Non-residential)	Capacity Rate (\$/kVA)
Low voltage (LV) mains (local street lines)	0.4485	1.00	\$34.87
Distribution substation	0.3347	0.83	\$290.70
Distribution feeder	0.1417	0.08	\$324.69
Zone substation	0.1417	0.09	\$565.83
Sub-transmission	0.1417	0.09	\$357.53

**All rates are exclusive of GST**

*Your actual capacity requirement will be confirmed during the application process based on your property's electrical load and the connection tier.*

*Larger connections may require detailed capacity analysis.*

*Exception rules under S6B.5 (2)&(3) of the Electricity Industry Participation Code 2010 may apply. Please refer to the Code or our Capital Contribution Guide for more details.*



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## For Residential Customers (Homes)

Most residential properties connect to our network at 15 kVA (1phase 63amps) capacity. Here's what a standard home connection costs:

Network Level	Diversity Factor (Residential)	Capacity Rate (\$/kVA)	Requested Connection	15kVA Charge (excl. GST)
LV mains (local street lines)	0.4485	\$34.87	15 kVA	\$234.60
Distribution substation	0.3347	\$290.70	15 kVA	\$1,459.47
Distribution feeder	0.1417	\$324.69	15 kVA	\$690.13
Zone substation	0.1417	\$565.83	15 kVA	\$1,202.68
Sub-transmission	0.1417	\$357.53	15 kVA	\$759.92
<b>Total Capacity Charge 15kVA @ LV mains level (excl. GST)</b>				<b>\$4,346.79</b>



## How Diversity Factors Work (Residential)

Residential customers have different capacity charges than commercial because:

- Homes don't all use maximum power at the same time
- Peak demand is typically early morning or early evening
- This reflects decades of load pattern data across similar properties

## Example (excl. GST):

- Raw Low Voltage (LV) mains rate: \$34.87/kVA
- After diversity discount (55% off): \$15.64/kVA
- **You save: \$19.23/kVA**



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**For Commercial & Industrial Customers**

*Worked Example: 50 kVA Commercial Connection*

Network Level	After Diversity Rate (\$/kVA)	Requested Connection	Charge (excl. GST)
LV mains (local street lines)	\$34.87	50 kVA	\$1,743.58
Distribution substation	\$241.28	50 kVA	\$12,064.14
Distribution feeder	\$25.98	50 kVA	\$1,298.75
Zone substation	\$50.93	50 kVA	\$2,546.25
Sub-transmission	\$32.18	50 kVA	\$1,608.86
<b>Total Capacity Charge 50kVA connection (excl. GST)</b>			<b>\$19,261.58</b>

Network Level	Capacity Rate (\$/kVA)	Diversity Factor	After Diversity Rate
LV mains (local street lines)	\$34.87	1.00	\$34.87
Distribution substation	\$290.70	0.83	\$241.28
Distribution feeder	\$324.69	0.08	\$25.98
Zone substation	\$565.83	0.09	\$50.93
Sub-transmission	\$357.53	0.09	\$32.18

*Worked Example: 150 kVA Industrial Connection*

Network Level	After Diversity Rate (\$/kVA)	Requested Connection	Charge (excl. GST)
LV mains (local street lines)	\$34.87	150 kVA	\$5,230.73
Distribution substation	\$241.28	150 kVA	\$36,192.41
Distribution feeder	\$25.98	150 kVA	\$3,896.26
Zone substation	\$50.93	150 kVA	\$7,638.75
Sub-transmission	\$32.18	150 kVA	\$4,826.59
<b>Total Capacity Charge 150kVA connection (excl. GST)</b>			<b>\$57,784.74</b>



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## Common Questions

### Q: Why do I pay for capacity I might not use?

A: Network infrastructure must be sized for peak demand. The diversity factor discounts your charge to reflect that not all customers peak simultaneously.

### Q: How does Top Energy's pricing compare?

A: Our rates reflect the unique costs of serving the Far North's dispersed population and challenging terrain. We're committed to transparent, cost-reflective pricing that supports network reliability.

### Q: Can I reduce my capacity charge?

A: Your capacity requirement is based on your expected electrical load. Efficient appliances and solar + battery systems can reduce ongoing usage charges, but connection capacity is sized for peak demand.

## Understanding the Terms

### LV mains (Low Voltage):

The 400V power lines in your street. Most homes and small businesses connect here.

### kVA (Kilovolt-Amp):

A measure of electrical capacity. Think of it like the size of the pipe delivering water — larger properties need bigger "pipes" for electricity.

### Diversity factor:

A discount applied because not all customers use their maximum capacity at the same time. Residential properties get larger discounts for some charges (0.45 factor for low voltage) because household demand varies more than business demand. Commercial/industrial properties generally get smaller discounts because their usage is more consistent.

### Distribution substation:

Transforms higher-voltage electricity from zone substations down to local distribution voltage (11 kV or 400V).

### Zone substation:

Major substations that transform transmission-level electricity (110 kV) down to distribution voltage (33 kV or 11 kV).

### Sub-transmission:

High-voltage lines (33 kV or 110 kV) that carry electricity from transmission networks to zone substations.



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