

## **Xcel Energy Responses to Proposed DG Scenarios**

### **a) 1 MW natural gas fired DG**

**1)** Energy Purchased by DG customer from the utility truly is “no” (on-site load is always less than generation output and if generation is out for scheduled or unscheduled maintenance then load is tripped off), but site is still connected to system to sell surplus energy.

Charges to customer:

- Incremental facilities costs as determined by study
- Monthly delivery charges
- Monthly ancillary services charges

Payments to customer:

- Surplus energy payments

**2)** Energy purchased by DG customer from utility is “no” except during generator outages (scheduled or unscheduled).

Charges to customer:

- Incremental facilities costs as determined by study
- Monthly delivery charges monthly ancillary services charges
- Monthly supply back-up capacity reservation fees
- Supply back-up energy usage charges as used

Payments to customer:

- Surplus energy payments

**3)** Customer plans for situation 1) above, but from time to time site load exceeds generation output.

Charges to customer:

- Incremental facilities costs as determined by study
- Monthly delivery charges
- Monthly ancillary services charges
- Supply back-up capacity use penalty
- Supply back-up energy unauthorized usage charges

Payments to customer:

- Surplus energy payments

### **b) 1-2 Mw (variable load) natural gas-fired DG**

Charges to customer:

- Incremental facilities costs as determined by study

- Monthly delivery charges
- Monthly ancillary services charges
- Supply back-up capacity reservation fee for 2 MW
  - 1MW Standby
  - 1MW Supplemental
- Supply back-up energy usage charges as used
- Residual retail service charges for 3MW

**c) 1.9 (?) MW wind energy DG**

**1) self service**

Charges to customer:

- Incremental facilities costs as determined by study
- Monthly delivery charges for 1MW of generation
- Monthly ancillary services charges for 1 MW of generation
- Supply back-up capacity reservation fee for 250 kW of load
  - 250 kW Supplemental
- Supply back-up energy usage charges as used

Payments to customer:

- Surplus energy payments

**2) buy-all/sell-all**

Charges to customer:

- Incremental facilities costs as determined by study
- Monthly delivery charges for 750 kW of generation above load
- Monthly ancillary services charges for 1 MW of generation
- Retail services for 250 kW of load

Payments to customer:

- Negotiated/bid contract

**d) 10 MW natural gas DG**

Same results as a) except larger generator may allow for a negotiated/bid contract for power sales from customer to utility.

**e) 3 kW solar photovoltaics DG**

Same results as c) except daylight output from generation limit will affect reliance on utility for supply and value of power to sell to utility.

**f) Multiple DG Installation: 3 30 kW (natural gas)**

The interconnection requirements may change between a 3 30 kW situation and a single unit 90 kW situation. However, the pricing results are the same as b).