

Dominion Virginia Power Community Solar Power Program

JCOTS Energy Subcommittee

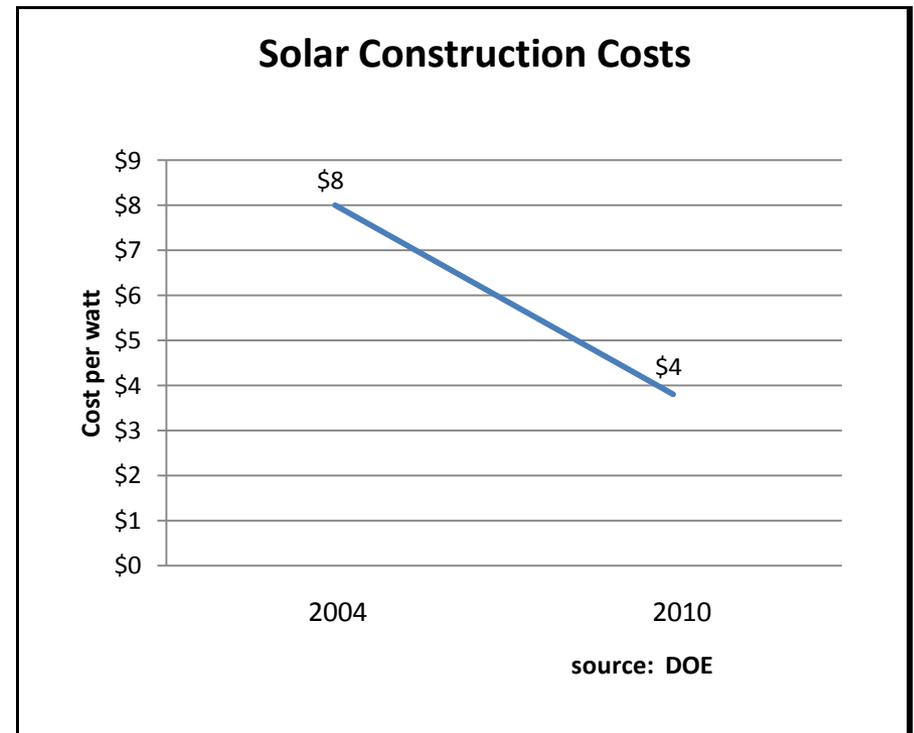
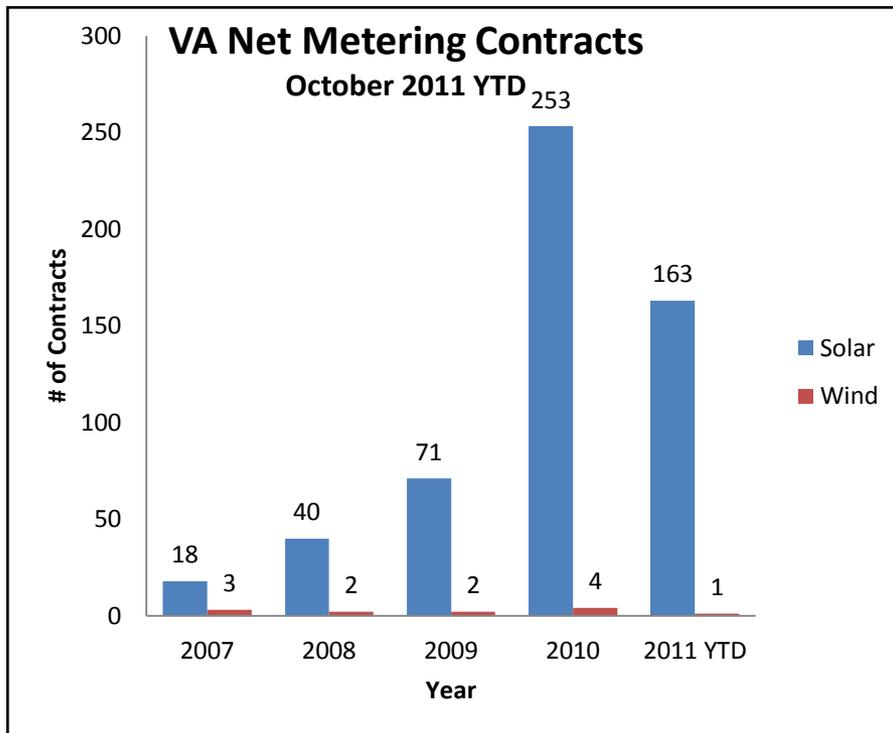
November 15, 2011



Solar Marketplace



Increasing customer interest & declining technology cost



Legislative Framework



2011 Legislation Promotes Solar Energy

- House Bill 1686 (Toscano) – Directs SCC to Consider:
 - Utility-owned Solar Distributed Generation (DG)
 - Special tariffs to facilitate customer-owned Solar DG as alternatives to net energy metering
 - Five year demonstration program, capped at 0.2% peak load
- House Bill 1912 (J. Miller) – Renewable Energy
 - Amended bill directs SCC to consider renewable energy resources that do not result in unreasonable rate increases

Program Design



Two-part demonstration program

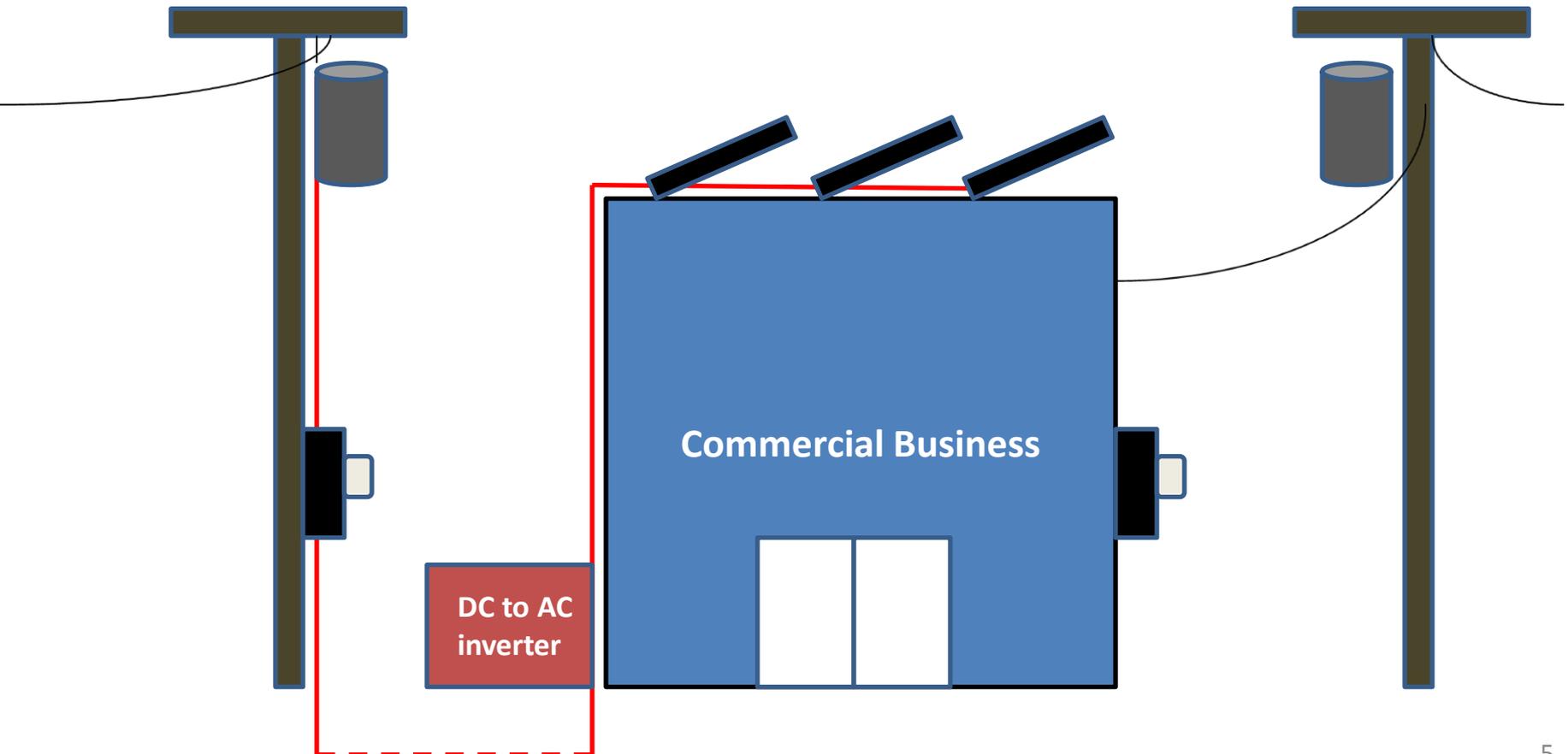
- 30 MW company-owned solar distributed generation
 - Located on leased commercial, industrial & governmental property
 - Typically 0.5 MW to 2.0 MW on a roof top
 - Phased-in approach; 10 MW in 2013, 20 MW between 2014 and 2015
 - Four sites in public settings (school, library, community association building)
- New tariff to purchase 3 MW of customer-owned solar distributed generation
 - New solar feed-in tariff option for customers as alternative to net energy metering
 - Allows customers to sell their solar energy to Dominion Virginia Power

Typical Installation

Power From Solar
Array Flows to
DVP Distribution
System

No Electrical Connection
Between Solar Array and
Customer Meter

Power For
Customer's Facility
Delivered from DVP
Distribution System



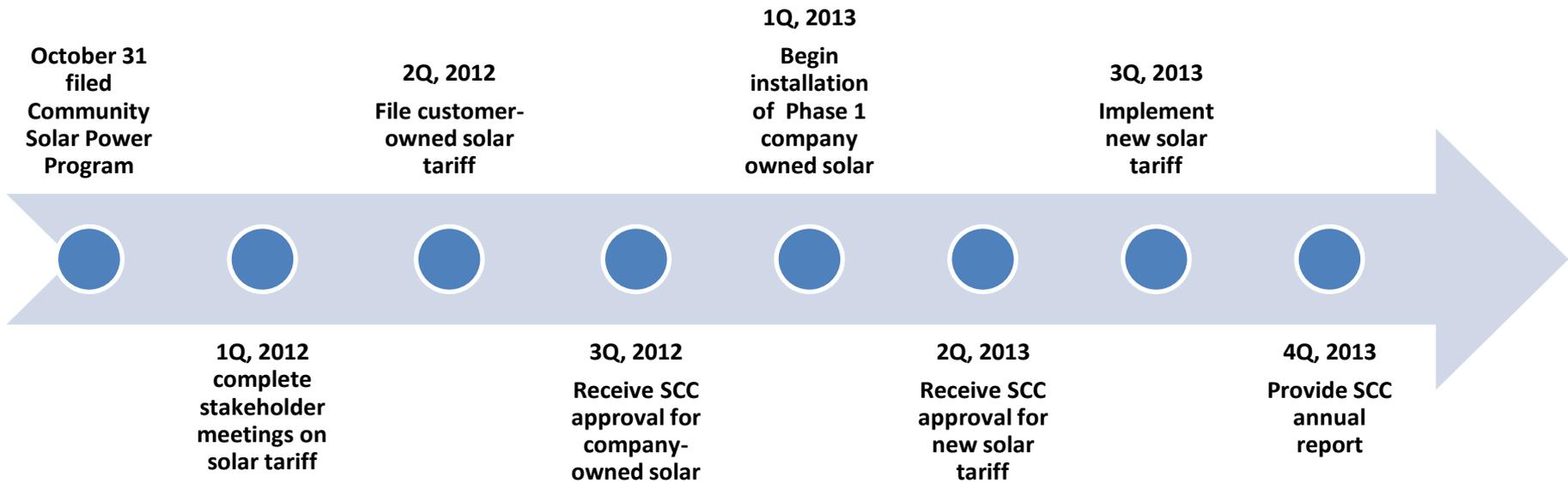
Rooftop Solar

1 MW solar installation

- Dominion Virginia Power signs lease agreement with customer
- All power flows back to company distribution system
- Space required: approx. 150,000 sq. ft. (150 sq. ft./kilowatt)
 - Big box store(WalMart) is 160,000 sq. ft.
- Installation time: 3 - 4 months
- System is ballast mounted on flat roof tops 5 years or newer



Timeline



Installation of Phase 2, company-owned solar occurs in 2014 & 2015