

# VIRGINIA 2018 SOLAR DEVELOPMENT OVERVIEW

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RAPPAHANNOCK-RAPIDAN  
REGIONAL PLANNING DISTRICT  
COMMISSION  
PIEDMONT ENVIRONMENTAL  
COUNCIL



April 13th, 2018

*The Solar Research Institute (SRI) is a 501(c)3 non-profit organization based in Richmond, VA and Washington, DC. SRI was founded to increase understanding of solar energy. To accomplish this goal, SRI performs a broad range of research, education, and public service activities.*





# SOLAR IN THE COMMONWEALTH OF VIRGINIA





66,893

EQUIVALENT HOMES

Source: Solar Energy Industries Association (SEIA) and GTM Research, *U.S. Solar Market Insight*

620

INSTALLED  
MEGAWATTS

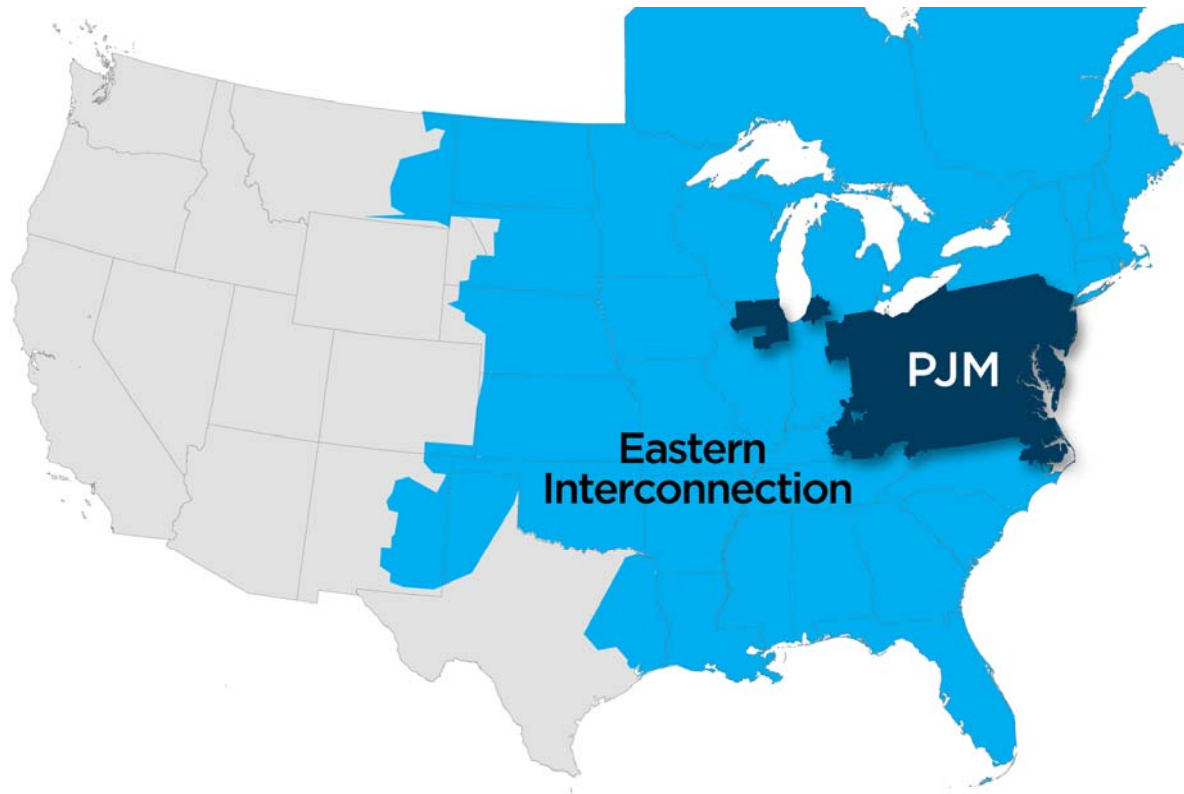
Source: Solar Energy Industries Association (SEIA) and GTM Research, *U.S. Solar Market Insight*

370

MEGAWATTS  
UNDER  
CONSTRUCTION

Source: Virginia Solar Energy Development and Energy Storage Authority, *2017 Annual Report*

1 MW OF SOLAR ENERGY POWERS APPROXIMATELY 250 HOMES AT PEAK OUTPUT






FACEBOOK  
HENRICO DATA  
CENTER  
\$1 BILLION  
INVESTMENT

100+ FULL-TIME  
JOBS

300 MW SOLAR





A wide-angle photograph of a vast solar farm. Rows of dark blue photovoltaic panels are tilted at an angle, stretching from the foreground into the distance. The panels are set against a clear, bright blue sky. In the lower-left foreground, a patch of green grass is visible between the rows of panels.

# 10.2% SOLAR JOBS GROWTH IN 2017

Source: Solar Foundation, 2017 Solar Jobs Census



# 3,565 SOLAR JOBS IN VIRGINIA

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Installation &  
Construction

Development

Sales & Distribution

Engineering



Source: Solar Foundation, 2017 Solar Jobs Census



# VIRGINIA OPERATIONAL SOLAR PROJECTS



NAS OCEANA (18  
MW)  
VIRGINIA BEACH



REMINGTON (20  
MW)  
FAUQUIER



UVA LIBRARY (141  
KW)  
CHARLOTTESVILLE



TOWN OF  
BEDFORD  
MUNICIPAL  
SYSTEM (6 MW)



# SOLAR LAND USE FOOTPRINTS

## DISTRIBUTED GENERATION



72,000 Sq Ft Per MW

*Note: Approximately 26% total area of small building rooftops are suitable for solar deployment*

## UTILITY SCALE SOLAR

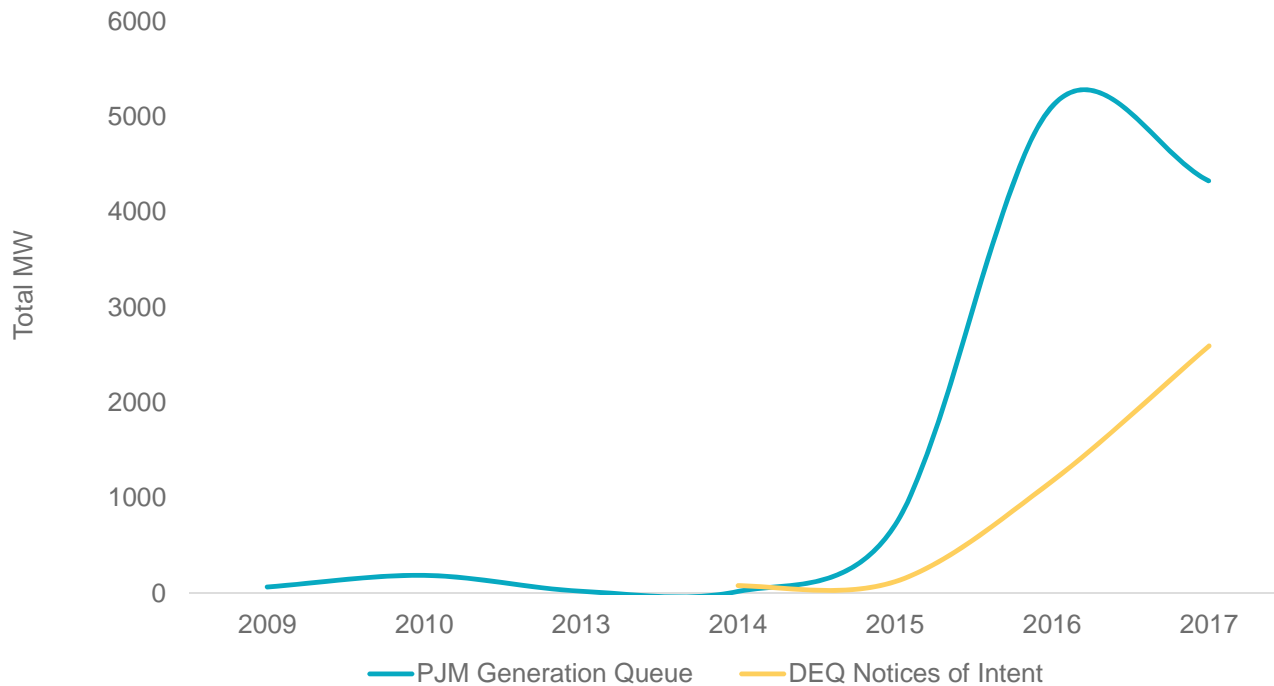


8 Acres Per MW

Source: National Renewable Energy Laboratory (NREL), *Rooftop Solar Technical Potential in the U.S.*, *Land Use Requirements for Solar Power Plants in the U.S.*



# SOLAR OUTLOOK, UTILITY-SCALE



## DEQ NOTICES OF INTENT

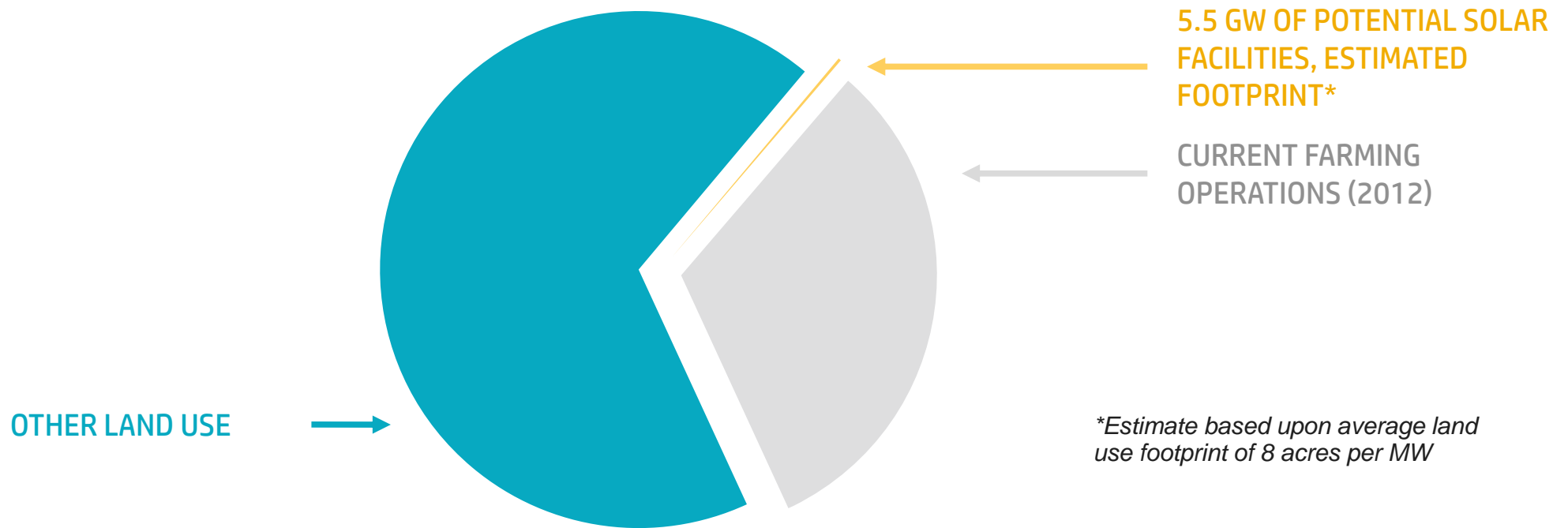
**Approved:** 17 Projects, (622.9 MW)  
**Pending:** 58 Projects (2902.35 MW)  
**Withdrawn:** 6 Projects (460 MW)

## PJM GENERATION QUEUE

**In Service:** 21 Projects (327 MW)  
**Pending:** 107 Projects (7,014 MW)  
**Withdrawn:** 95 Projects (4,823 MW)



# FUTURE IMPACTS



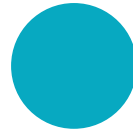
Source: USDA 2017 Agricultural Census

# LONG-TERM PLANNING STRATEGIES

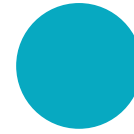
SPECIAL EXCEPTION,  
CONDITIONAL USE  
PERMITS



COMPREHENSIVE PLAN  
AMENDMENTS



PUBLIC FACILITIES  
REVIEW ("2232")





## ADDITIONAL RESOURCES



VA DEPT OF ENV QUALITY  
[deq.virginia.gov](http://deq.virginia.gov)



NC CLEAN  
TECH  
[nccleantech.org](http://nccleantech.org)



VA ASSOCIATION OF  
COUNTIES  
[vaco.org](http://vaco.org)



SOLSMART  
[solsmart.org](http://solsmart.org)



VA COOPERATIVE  
EXTENSION  
[ext.vt.edu](http://ext.vt.edu)



NATIONAL RENEWABLE  
LABORATORY  
[nrel.gov](http://nrel.gov)

## CONTACT US

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