

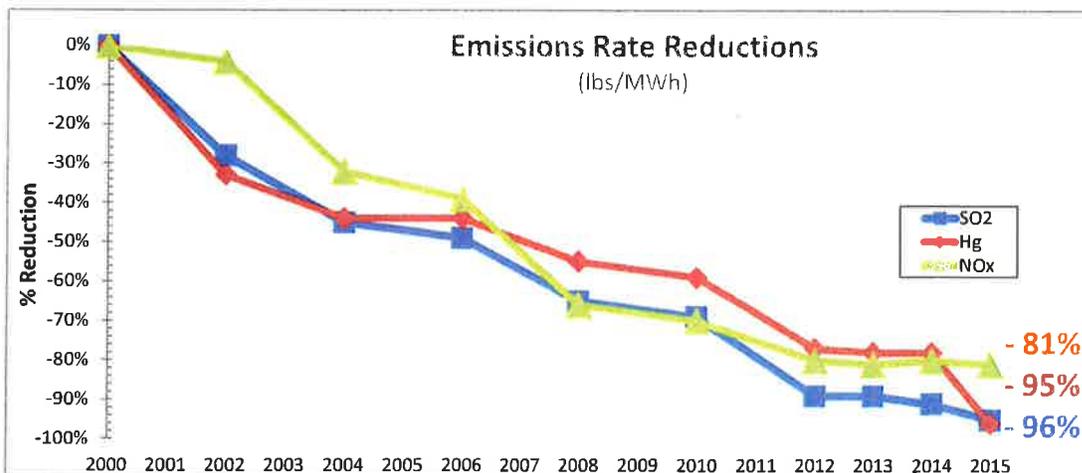


Powering the Peninsula

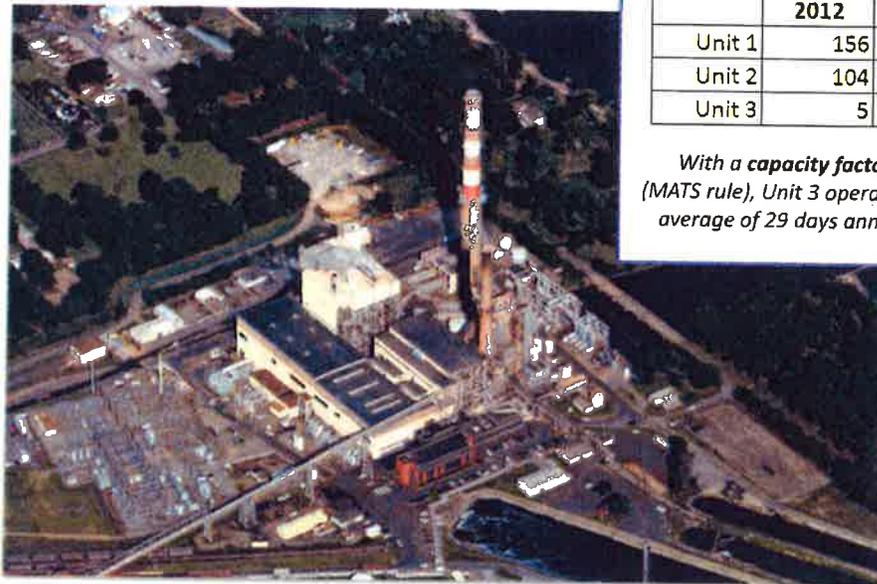
ENVIRONMENTAL

Constantly Improving:

- Over the last 15 years, we are seeing constant improvements in reducing our system-wide emissions



During the same timeframe, Dominion's system-wide carbon emissions was reduced by 23%.



© Scott Keating

Yorktown Power Station
Days at 100% Capacity

	2012	2013	2014
Unit 1	156	97	112
Unit 2	104	117	122
Unit 3	5	5	8

With a **capacity factor limitation of 8%** (MATS rule), Unit 3 operations are limited to an average of 29 days annually at full capacity

DOZENS OF ALTERNATIVES CONSIDERED

Generation Alternatives

- X Retrofitting Yorktown Power Station
- X Repowering Yorktown Power Station
- X New Generation
- X Demand-Side Management (DSM only ~ 70 MW)

Transmission & Hybrid

- X Chickahominy – Lanexa 500 kV
- X Save The James Alliance Alternative
- X 214/263 230 kV Line Rebuild (James River Bridge Crossing)
- X Chuckatuck – Newport News 230 kV (Whittier Hybrid)
- X Surry – Whealton 500 kV Line
- X Surry – Skiffes Creek 500 kV Underground (Alternating Current)
- X Surry – Skiffes Creek 500 kV Underground (High Voltage Direct Current)
- X Surry – Skiffes Creek 230 kV Underground (With and Without Yorktown Generation)
- X Chickahominy – Skiffes Creek 500 kV *(Resolves NERC Criteria Violations but with greater environmental impacts and costs than Proposed Project)*
- **APPROVED BY SCC: Surry – Skiffes Creek 500 kV, Skiffes Creek – Whealton 230kV, Skiffes Creek Switching Station**



Surry – Skiffes Creek – Whealton *Electric Transmission Project*

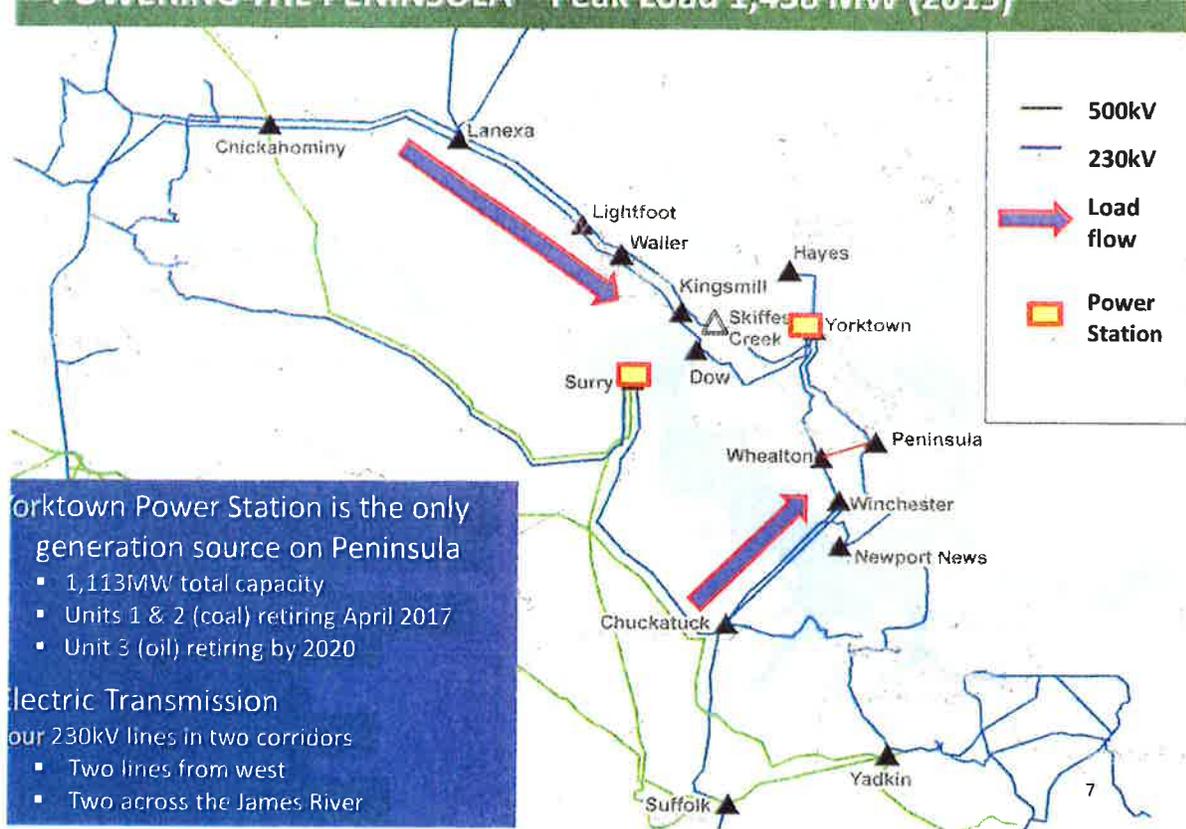
September 2016

SUMMARY OF CHALLENGES

- ❖ Growing need for electricity on Virginia's Peninsula
- ❖ Yorktown coal units scheduled for closure April 2017
- ❖ Federal law mandates compliance with electric reliability standards

The future without Skiffes Creek project in service:

- Potential widespread blackouts across Peninsula from April 2017 until Skiffes Creek project is complete
- Automatic scheme being developed to avoid outages cascading into Richmond, Northern Virginia or North Carolina

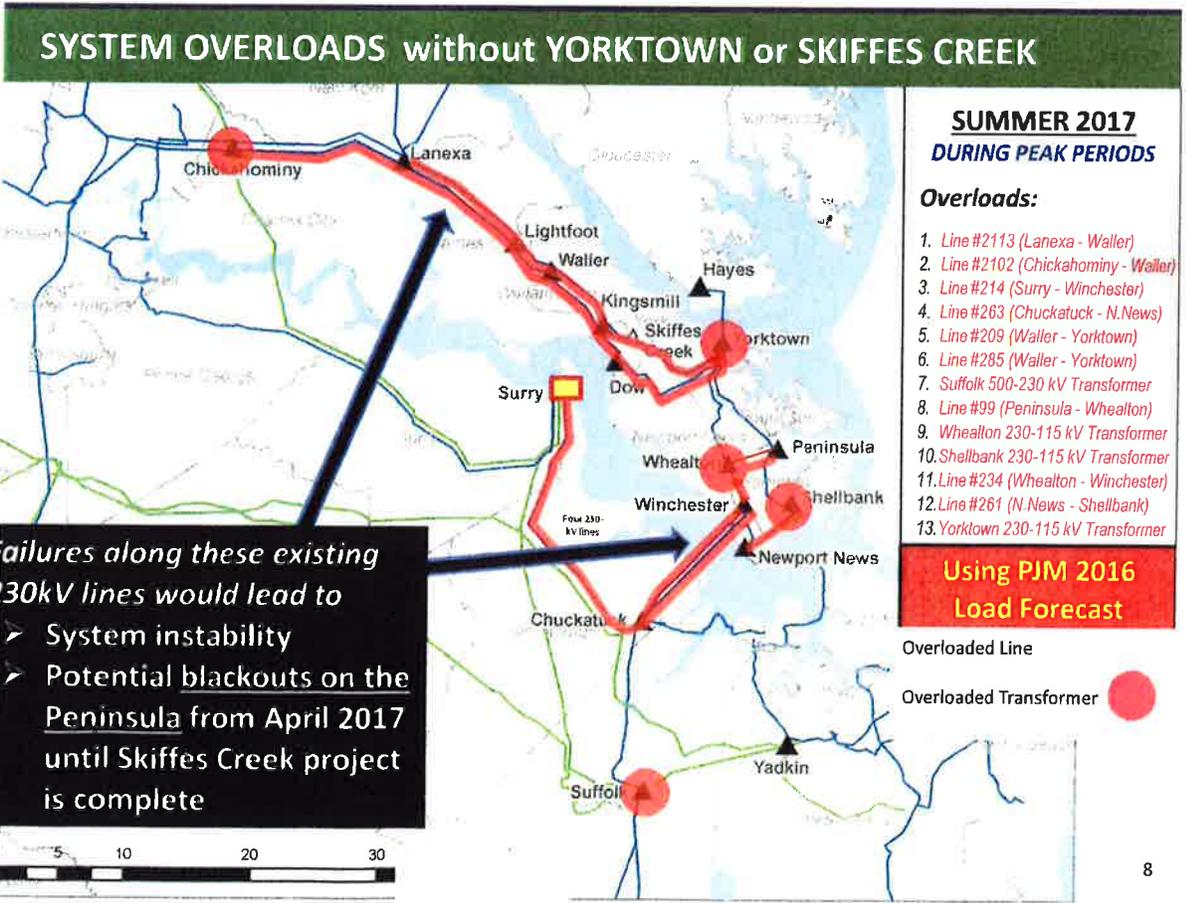


Yorktown Power Station is the only generation source on Peninsula

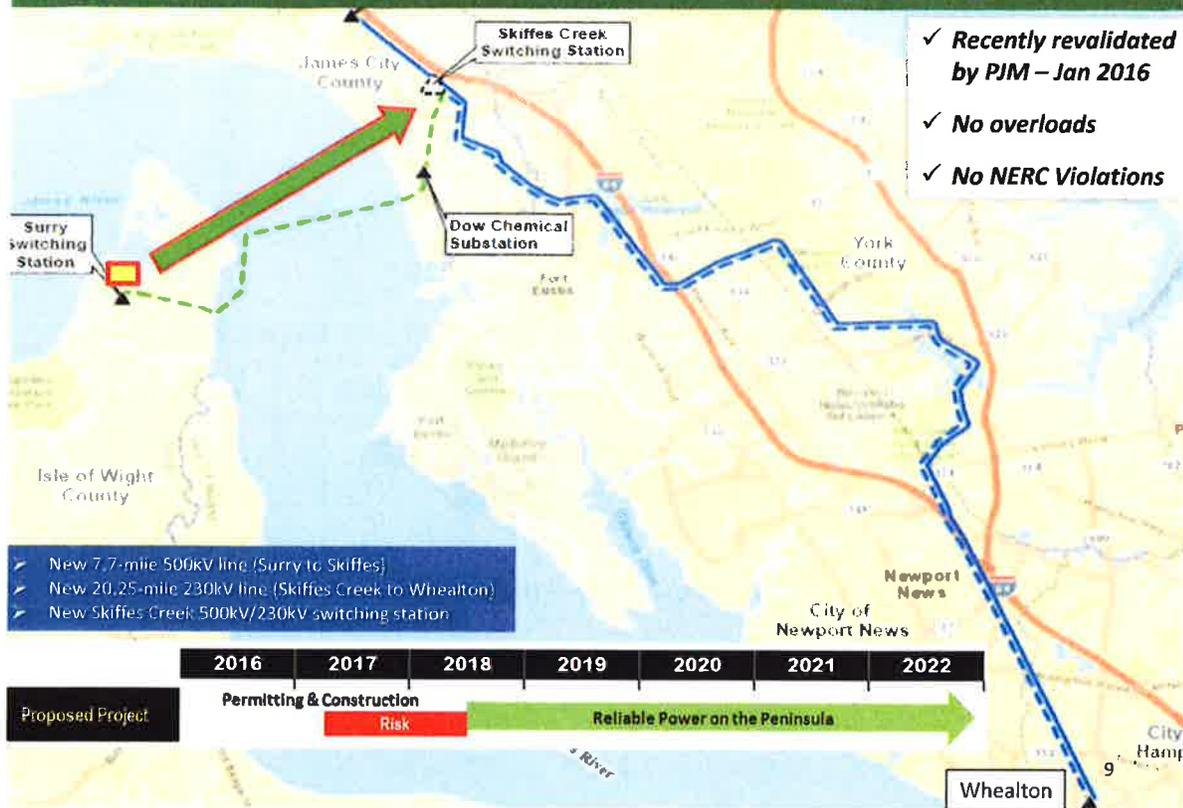
- 1,113MW total capacity
- Units 1 & 2 (coal) retiring April 2017
- Unit 3 (oil) retiring by 2020

Electric Transmission

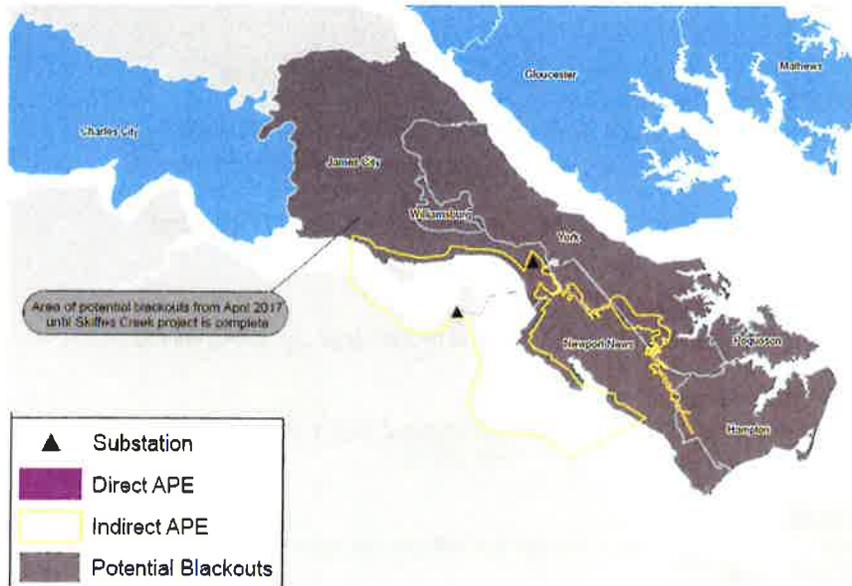
- Four 230kV lines in two corridors
- Two lines from west
- Two across the James River



THE SOLUTION – SURRY TO SKIFFES CREEK TO WHEALTON



OUTAGE SCENARIOS – Isolate Impacts to the Virginia Peninsula



Historical operating data indicates 50-80 HIGH RISK DAYS per year for potential outages

APE – Area of Potential Impact determined by USACE

** James City County, York County, Williamsburg, Newport News, Hampton, Poquoson 10

TRANSMISSION LINES:

Need for new line announced Virginia SCC Project Approval	Early 2011 Feb. 28, 2014
Virginia Marine Resources Commission – Filed August 2013	Pending
U.S. Army Corps of Engineers Permit Application Filed -- NEPA Environmental Assessment -- National Historic Preservation Act Section 106 Consultation	August 2013 Pending Pending

**Signed Mitigation MOA
is an Essential Step** →

WATCHING STATION:

James City County Special Use Permit – Filed June 2015	Pending
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MITIGATION AGREEMENT – APPROVAL REQUIRED OF FOUR PARTIES

] \$85 million Obligated

- Funding is provided for a wide variety of projects that will preserve and enhance the cultural and natural features of the historic district (i.e. landscapes, shorelines, and water quality)
- Provide for enhanced visitor experience opportunities at various heritage tourism destinations within the APE
- These projects will be developed and implemented in consultation with recognized experts as well as the Corps, SHPO, and other signatories to the MOA
- Provisions are also provided for handling unanticipated discoveries and disputes in consultation with the Corps and SHPO

] Underwater and Terrestrial Archaeological Sites

- A plan to avoid impacts will be prepared and submitted for review and approval by the Corps and SHPO prior to implementation
- Implementation of the plan will be monitored by a third party archaeologist
- The one archaeological site that cannot be avoided will have data recovery completed prior to any construction in the area of the site; work will be reviewed and approved by the Corps and SHPO

] Electric Transmission Infrastructure

- Steps will be taken to evaluate and apply, as appropriate, tower coatings that will help minimize the visual impact of the towers when viewed from a distance
- Dominion has committed not to add any new tower infrastructure within the APE or increase the proposed tower heights for the life of the project
- Dominion further commits to review every 10 years the need for the project and the availability of industry accepted technology to put the lines under the river.

- U.S. ARMY CORPS OF ENGINEERS NORFOLK DISTRICT
- DOMINION VIRGINIA POWER
- VIRGINIA STATE HISTORIC PRESERVATION OFFICE
- ADVISORY COUNCIL ON HISTORIC PRESERVATION

Without resolution of historic preservation issues the Corps cannot make a final permit decision

CONSEQUENCES OF FAILING TO ENERGIZE PROJECT



Reliability risks without Skiffes Creek in service by 2017

Under certain conditions, system load can exceed limits which create the possibility of cascading blackouts

Blackouts could occur with or without advanced warning depending on the circumstances

