

Spotsylvania Solar Energy Center Traffic Mitigation Plan

December 13, 2019

The following Traffic Mitigation Plan (TMP) describes various policies for the management of traffic for the duration of construction of the proposed Spotsylvania Solar Energy Center. These strategies will address school bus avoidance, on-site and off-site parking and ridesharing programs, haul route pavement maintenance, temporary traffic control measures, safety and deliveries. sPower and the general contractor will work closely with Spotsylvania County and the Virginia Department of Transportation (VDOT) to ensure the safe and efficient movement of local traffic throughout the anticipated 18-month construction period.

School Bus Avoidance

Spotsylvania County Schools bus stops exist along Orange Plank Road, West Catharpin Road, Post Oak Road, and along various connecting side streets in the vicinity of the project area. These stops serve eleven different local area elementary, middle and high schools. The school year begins in early August and ends in late May.

sPower is prepared to take steps to ensure that students are kept safe and minimal interaction occurs between construction traffic and school bus operations. This will be achieved through a combination of the following strategies:

- Wide-load deliveries will be restricted between 6:10 AM and 8:40 AM and between 2:45 PM and 4:30 PM during the school year. sPower will educate drivers on school bus pickup hours and locations.
- Employees will be encouraged to participate in ridesharing programs to reduce commuter traffic to the site (see Parking and Ridesharing).
- Reduced speed limits during the school year near bus stop locations will be a suggested traffic calming measure to VDOT. Speed limits will be communicated via temporary signage along construction traffic routes and through driver education.
- Installation of temporary signage informing drivers of a school bus stop ahead and hours of operation for those stops along construction haul routes (Orange Plank Road, West Catharpin Road, and Post Oak Road).
- Informational handouts will be prepared and distributed to students and parents in coordination with Spotsylvania County Schools. These handouts will describe the truck routes, hours of operation, and construction schedule and duration, as well as basic safety precautions for walkers and students waiting at bus stops.
- Potential “high-risk” bus stops will be identified in coordination with Spotsylvania County Schools. These locations will be considered for temporary relocation or enhanced safety measures, such as signage to indicate safe waiting areas and warn of heavy truck traffic.

Parking and Ridesharing

On-Site Parking

On-site parking will be provided adjacent to construction entrances within the project. Open space free of solar panels and other infrastructure has been made available to allow for adequate parking on site. Parking area size will fluctuate based on the construction phasing and number of workers needed at each entrance. Construction parking areas will be set back a minimum of 500 feet from any adjoining residential structure.

The contractor will utilize multiple seat vehicles/shuttle buses/vans to transport employees to and from various construction areas within the site to reduce the number of vehicle trips between sites and optimize the use of parking areas around the project.

Off-Site Parking

The following off-site parking opportunities in the greater Fredericksburg area and along the I-95 corridor are under consideration:

- **Park and Ride and Virginia Railway Express (VRE) Parking Lots** – VDOT manages six park and ride lots for a combined total of over 5,000 parking spaces in the greater Fredericksburg area. sPower will work with VDOT representatives to identify lots with excess capacity.
- **Private Parking Lots** – Private parking lots with excess capacity during regular business hours may be considered for agreements for temporary parking. Potential locations could include the Spotsylvania Town Center, local churches, or other commercial shopping centers.

Based on the available off-site parking capacity, sPower and the contractor will identify one or more locations as hubs for employees to meet and utilize the encouraged ridesharing opportunities. The following strategies are under consideration to facilitate and promote ridesharing among employees:

- **Shuttle Service/Vanpool** – Shuttle and vanpool services may be contracted during construction. These services require established pick-up/drop-off areas and pre-scheduled departure times, which may be on a limited schedule. Potential shuttle and vanpool services for this project have been researched based on anticipated use, rental cost for vehicles and parking lot space, lost productivity due to increased travel times has concluded that shuttle service may not be logistically and financially viable. Additionally, there are safety concerns with site accessibility in the event of an emergency to provide employees with timely access to their vehicles.
- **App-Based Carpool Programs** – A number of app-based carpool programs, such as Scoop, RideAmigos, iCarpool, and Waze Carpool, currently offer employer partnership packages. These platforms facilitate carpooling by connecting users, optimizing commute routes, and tracking usage for incentive programs. In some cases, carpooling also allows for direct pick-up from residences, reducing the need for off-site parking. Carpooling allows greater flexibility for employees than shuttles or vanpools while still reducing the number of single occupancy vehicles on the road. sPower and the contractor will educate employees on the selected program and encourage them to utilize the resource to help mitigate traffic.

- **Carpool Promotional Materials** – sPower and the contractor will provide employees with brochures and other informational materials on the benefits of carpooling, such as lower stress, transportation cost savings, and reduced wear-and-tear on private vehicles.

Pavement Maintenance along Haul Routes

Portions of the surrounding public roadways will be designated as haul routes for deliveries during construction. The following procedures will be set in place for the assessment and maintenance of haul route pavements before, during, and after construction.

1. Prior to construction, representatives from Spotsylvania County, VDOT, sPower, and the contractor will coordinate to drive the designated haul routes to collect observations and video footage of current pavement conditions. The pre-construction pavement conditions will be documented for future reference.
2. At the conclusion of construction, representatives from Spotsylvania County, VDOT, sPower, and the contractor will coordinate to drive the designated haul routes to collect observations and video footage of current pavement conditions. The post-construction pavement conditions will be documented and compared to pre-construction conditions.
3. At project completion, sPower will restore road damage determined to be caused by construction vehicle negligence in coordination with Spotsylvania County and to the satisfaction of VDOT as permitted.
4. If pavement along a haul route becomes damaged due to construction traffic, as confirmed with VDOT, to the point where it has become unsafe for use, sPower will repair the damage at their expense within 48 hours upon notice from the County's transportation planner and/or VDOT.

Temporary Traffic Control Measures

Temporary traffic control measures will be implemented in accordance with the most recent version of the Virginia Work Area Protection Manual (WAPM). Traffic control for construction activity within the public right-of-way will be implemented in accordance with typical traffic control applications. Necessary construction activity within the public right-of-way will be identified as construction documents are prepared and traffic control plans will be included in the construction documents as necessary.

Traffic control measures will also be installed at active construction entrances. These will include but are not limited to the following:

- advanced warning signs
- flaggers at the entrance location to facilitate truck turns for wide-load deliveries
- If sight distance is limited on the approach to a construction entrance, additional warning signs will be installed.
- temporary traffic signals
- reduced speed limits
- Additional construction traffic warning signage
- channelizing devices



These VDOT-approved measures may be implemented as needed and will be addressed during the site plan process and the VDOT permitting process.

Deliveries

Deliveries shall occur between the hours of 9:00 AM and 2:45 PM during the months of August through May to the extent practical to avoid school bus activity. Deliveries shall occur between the hours of 8:00 AM and 6:00 PM during all other months.

Delivery instruction shall be provided to all suppliers and contractors.

Trained employees shall assist when deliveries are accessing the Project Site.

Banksmen shall ensure the safe passage of pedestrians and vehicular traffic when vehicles are being loaded and unloaded.

Delivery vehicles shall not wait or stack on County roads.

Suppliers and contractors shall utilize primary delivery routes identified in this Construction Traffic Plan to the extent possible. In the event delivery routes are not feasible, new routes shall be identified and coordinated with Spotsylvania County staff.

sPower and its contractor shall issue maps to suppliers identifying primary delivery routes.

Identification of surrounding truck stops shall be identified prior to construction to ensure that trucks can stage overnight prior to scheduled deliveries.

sPower and its contractor shall coordinate a daily delivery schedule for suppliers and provide, via electronic distribution, to Spotsylvania County and nearby residents when available.

Permits for oversized or overweight loads, if any, on primary delivery routes shall be obtained from VDOT and coordinated with Spotsylvania County. Such permit loads shall be subject to the conditions of the permit at the time of issuance.

Safety

Speed limit signs of 15 mph shall be clearly displayed at all ingress and egress points, as well as throughout the Project Site.

At least two weeks prior to construction, residents, schools, and businesses along primary delivery routes shall be notified of the construction activities.

A 24-hour contact shall be provided to Spotsylvania County staff and residents for both the contractor and sPower. The contact shall be responsible for responding to inquiries or concerns of surrounding residents and businesses, as well as the general public.

Where necessary, flagmen with communication devices shall be used to coordinate delivery and hauling activities at the Project Site.

General construction signs shall be placed in pre-approved areas along primary delivery routes in the vicinity of the Project Site to notify residents of construction delivery locations.