



April 21, 2022

Ms. Rachel Assink
Rulemaking Lead
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

Subject: Sound Transit Comments on Clean Fuel Standard Rulemaking

Dear Ms. Assink,

Thank you for the opportunity to comment on the Washington Clean Fuel Standard's (CFS) draft rule. Sound Transit (ST) commends the spirit of the CFS draft rule, as it mirrors our agency's strong commitment to reducing greenhouse gas emissions in the transportation sector and to improving air quality in the Central Puget Sound region.

Sound Transit provides high-capacity transit – an environmentally preferable alternative to personal automobile travel – to affordably connect people to jobs, education and healthcare across the region. In the aggregate, the agency provides significant regional greenhouse gas emission reduction benefits.

- In 2019, the agency's services displaced 370,000 metric tons of greenhouse gas emissions, equivalent to six times the agency's operational greenhouse gas emissions.
- Link light rail represents the fastest, most reliable zero emission regional transit option in the state. With the 2020 launch of the PSE Green Direct power purchase agreement, Link light rail became the first major U.S. light rail system operated with 100% carbon-free electricity.

We believe the CFS will benefit the agency when it goes into effect in 2023. Our analysis indicates that additional costs for diesel fuel for ST Express bus and Sounder commuter rail services will most likely be mitigated by the credit revenue generated from operating the carbon-free, electricity-powered Link light rail service. As the agency opens the East Link, Lynnwood Link, Downtown Redmond Link, and Federal Way Link Extensions in the coming years, the benefit to the agency will continue to grow. Credit revenue generated by Sound Transit's electric transportation services will provide valuable assistance to support the decarbonization of Sound Transit's bus and heavy rail fleet operations, while also expanding the environmental benefit provided to the region.

As a future participant in the CFS program, Sound Transit wishes to provide the following feedback on the draft rule:

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- Provided that the Department of Ecology implements an in-service cut-off date for fixed guideway transit systems in proximity to the program launch date of 2023, Sound Transit requests that the cut-off date be July 1st, 2021, the start of the current fiscal biennium following Governor Inslee's May 17th, 2021 signature of the CFS legislation into law. While electricity consumed by the Link light rail system built up to that point will generate lower volumes of CFS credits, the light rail segments put into service in the 18 months prior to the implementation of the program in 2023, like Northgate Link Extension, will be able to generate larger volumes of credits.
 - Clean fuel standards in other U.S. states have set in-service cut-off dates for fixed guideway transit systems, past which the electricity consumed to provide service generates credits at a higher rate. Participating jurisdictions have instituted these in-service thresholds to (i) maintain suitably high credit prices by restricting the total volume of credits generated and (ii) incentivize the development of future fixed guideway transit.
 - The California Air Resources Board (CARB), which oversees California's Low Carbon Fuel Standard (LCFS), allows light rail segments operated on or after January 1, 2011 to use an Energy Economy Ratio (EER) of 3.3 in calculating credit generation, rather than an EER of 1, as is required for light rail segments operated prior to 2011. Accordingly, kilowatt hours consumed to power the post-2011 light rail segments are worth 3.3 times more on the credit marketplace than those consumed on the pre-2011 light rail segments.
 - Oregon's Clean Fuels Program (CFP) employs a similar credit generation methodology but uses an in-service cut-off date of 2012 rather than 2011. It also deems light rail electricity consumption on the post in-service cut-off segments to be 3.3 times as valuable on the credit marketplace.
 - While California's LCFS launched in 2011 with an in-service cut-off date of January 1, 2011, Oregon's CFP launched in 2016 with a years earlier in-service cut-off date of January 1, 2012. Oregon's precedent suggests that an in-service cut-off date for fixed guideway transit preceding the implementation date of the program by some period is not outside the norm.
- Sound Transit requests that the Department of Ecology employ a credit generation methodology that more closely values the kilowatt hours consumed by pre and post in-service cut-off fixed guideway segments than those of California's LCFS and Oregon's CFP. Sound Transit propels Link light rail passengers from point A to point B using clean electricity; the environmental benefit of this service to the region is not appreciably different once a train car passes from a 'pre in-service cut-off' rail segment to a 'post in-service cut-off' rail segment.
- Sound Transit seeks clarification on permissible approaches to reporting pre and post in-service cut-off date electricity consumption from fixed guideway transit. Link light rail is a single contiguous system that uses traction power substations (TPSS) along the track alignment to energize the overhead catenary wire system and to power the light rail vehicles (LRVs) that move passengers. Accordingly, there are ambiguities about how electricity consumption from Link might be assigned to pre and post in-service cut-off date segments of the system. Sound Transit requests that the Department of Ecology allow a flexible range of allocation methodologies such as:
 - Grouping and aggregating the kilowatt hours consumed by the traction power substations operating in support of revenue service before and after the in-service cut-off date

- Aggregating all traction power electricity and prorating it based on track mileage in service pre and post cut-off date
- Aggregating all traction power and prorating it based on the vehicle miles traveled of individual LRVs in service before and after the cut-off date
- Sound Transit requests the Department of Ecology provide more detail regarding the specific types of electrified transit activities eligible to generate credits.
 - Beyond traction power, there are critical aspects of light rail electricity consumption that Sound Transit believes merit consideration for credit generation eligibility. In addition to traction power, electricity consumption for station lighting, vertical conveyance and wayside infrastructure is necessary to ensure safe, reliable light rail service.
 - If Sound Transit is required to exclusively report electricity used for traction power, will it be expected to submeter the handful of utility meters that jointly supply both traction power substations and non-traction station consumption?
- Sound Transit requests that electricity used to charge or otherwise power zero emission locomotives qualify for credit generation like other battery-electric or hydrogen fuel cell transit vehicles under the CFS. Transit agencies, passenger railroads, and freight companies around the world are investing in and deploying battery-electric and hydrogen fuel cell trains to reduce fuel costs and mitigate diesel emissions. The CFS should incentivize the adoption of zero emission railroad technologies in Washington State.

Additionally, Sound Transit encourages the Department of Ecology to consider station wayside power as a permissible credit generating activity. When Sounder commuter rail trains remain in station for extended periods of time prior to departure, Sound Transit uses wayside power connections to electrically operate vehicle lights, HVAC, and doors, rather than running the train's head end power (HEP) diesel engine to generate electricity. Wayside power is an important tool Sound Transit has used in recent years to immediately reduce diesel combustion and emissions.

- Sound Transit requests that the Department of Ecology allow credit revenue generated by transit agencies be free of non-discretionary requirements. Permitting transit agencies flexibility in spending the revenue on decarbonization will enable the deployment of zero emission vehicles and supporting infrastructure, across years and routes, and will result in the most effective use of funds.

We appreciate the opportunity to provide input on the draft Clean Fuel Standard rule. Thank you for your time and careful consideration.

Sincerely,



Kimberly Farley
Chief System Officer, Sound Transit

cc: Don Billen, Executive Director of Planning, Environment and Project Development