

MOTION NO. M2018-91

Agreement with Puget Sound Energy for the Green Direct Program

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Executive Committee	08/02/2018	Recommend to Board	Don Billen, Executive Director, PEPD Bonnie Todd, Executive Director of Operations
Board	08/23/2018	Final Action	Amy Shatzkin, Sustainability Manager Jessica Rose, Resource Conservation Manager

PROPOSED ACTION

Authorizes the chief executive officer to (1) execute a new power purchase agreement with Puget Sound Energy (PSE) through its Green Direct – Phase 2 program to purchase locally produced renewable wind and solar power starting in 2021 with a 10-year fixed-rate contract for 32 Sound Transit electricity accounts and (2) execute an amendment letter with PSE for the Green Direct – Phase 1 program that is projected to lower Sound Transit’s costs to purchase wind power for six Link light rail accounts for a 10-year fixed rate contract starting in 2019.

KEY FEATURES SUMMARY

- Sound Transit’s 2015 Sustainability Plan and the Sound Transit 3 Plan (ST3) commit the agency to reduce greenhouse gas emissions, expand the use of renewable energy and make all facilities and electricity carbon-neutral by 2030.
- The first power purchase agreement with PSE was approved by the Board in January 2017 through Motion No. M2017-11. The 2017 agreement enrolled six Link light rail accounts for a 10-year contract term to purchase locally produced, wind power. PSE refers to this initial power purchase agreement as Green Direct – Phase 1.
- The Green Direct – Phase 2 program is another power purchase agreement opportunity that allows Sound Transit to directly purchase locally produced, renewable wind and solar power from PSE over a 10-year fixed-rate contract term, from 2021 to 2030. Entering into this agreement also lowers the costs of the Green Direct – Phase 1 agreement. The lower Phase 1 cost is only enabled when an organization also enters into a Phase 2 agreement with PSE.
- If this motion is approved, all Sound Transit PSE accounts will be enrolled in the Green Direct program.
- Currently, Sound Transit’s electricity is powered by Seattle City Light (SCL), Puget Sound Energy (PSE), Snohomish PUD (SnoPUD), Tacoma Public Utilities (TPU) and Lakewood Light and Power. Of these utilities, PSE’s electricity was responsible for 18 percent of consumption and 96 percent of electricity-related greenhouse gas emissions in 2017.
- There is no capital cost for entering into this agreement. Furthermore, this agreement will lower PSE-related electricity costs as the electricity rates for the 32 accounts proposed for enrollment in the Green Direct - Phase 2 program are lower than both current commercial rates and future projected rates.
- Sound Transit’s participation in the Green Direct program provides opportunities to:
 - Lower the cost of electricity by entering into long-term agreements with Puget Sound Energy;

- Reduce exposure to utility price increases and potentially reduces long-term operating costs;
- Reduce agency greenhouse gas emissions from electricity by 96 percent starting in 2021; and
- Meet Sound Transit's sustainability goals to reduce greenhouse gas emissions and make electricity use carbon neutral.

BACKGROUND

Sound Transit's 2015 Sustainability Plan and the ST3 Plan commit the agency to make all facilities and all electricity carbon-neutral by 2030.

In order to meet this commitment, the agency is pursuing three main implementation strategies:

1. Continue to invest in energy efficiency for existing and new facilities.
2. Purchase renewable energy through alternative means, such as power purchase agreements like the Green Direct program.
3. Develop on-site renewable energy installations.

Green Direct program overview

The Green Direct – Phase 2 agreement with PSE commits the agency today (2018) to purchase electricity for PSE accounts from locally-produced solar and wind power sources.

- The agreement includes a 10 year fixed rate contract beginning in 2021 for 32 accounts that will be enrolled in this program.
- When the program is executed in 2021, the electricity rates will be approximately five percent lower than current PSE commercial rates.
- These 32 PSE accounts consume approximately 2.4 million kilowatt hours of electricity annually and account for 26% of the agency's consumption from PSE and 5% of overall electricity consumption.
- If this motion is approved, all Sound Transit PSE accounts will be enrolled in the Green Direct program.

Entering into the Green Direct – Phase 2 agreement also makes Sound Transit eligible for an amendment to the Green Direct – Phase 1 agreement that lowers the cost of that existing agreement.

- The Phase 1 power purchase agreement powers six Link light rail accounts already enrolled in the Green Direct program from locally-produced wind power sources.
- These six PSE accounts consume approximately 6.7 million kilowatt hours of electricity annually and account for 73% of the agency's consumption from PSE and 13% of overall electricity consumption.

There will be no impact on operations and the agreement will not alter the security of electricity provision to these accounts. The wind and solar power projects that Sound Transit's agreement supports will add renewable energy to PSE's production portfolio - and allow Sound Transit to claim the benefits of that production.

Green Direct program benefits

Transitioning electricity use to renewable energy via both Green Direct phases will save utility costs and further reduce the agency's overall environmental footprint. Entering into this agreement will allow Sound Transit to reduce its greenhouse gas emissions from electricity by 96%. Reducing the

greenhouse gas emissions and air pollution associated with facility energy use improves the regional air quality benefits of people switching from driving to transit and helps green one of our region's most fossil fuel dependent utilities.

PSE is pursuing the development of new solar power projects for Phase 2 based on the early commitment of businesses and local governments, such as Sound Transit. These projects only received approval from PSE after sufficient demand had been committed to participation by local businesses and governments. The Green Direct – Phase 2 solar power project will be sited in south central Washington, providing clean technology jobs to the region. Permits have been approved for the project.

Considerations and next steps

If the Green Direct program's solar power project is delayed and solar power is not available at the anticipated commencement date, the contract commencement and term will be delayed accordingly. If PSE determines in its own discretion that the project will not produce adequate power to meet Sound Transit's needs, it may terminate the contract with no liability to Sound Transit. If in any given year the renewable energy produced by the solar power project is inadequate to meet subscribers' needs, the deficiency will be distributed pro-rata among subscribers to the program, and PSE will purchase renewable energy credits on behalf of subscribers in an amount up to the net amount of funds to be collected under the contract.

In order to meet the agency's commitment to expand the use of renewable energy and make all facilities and electricity carbon-neutral by 2030, the agency will need to recalibrate its carbon neutral and renewable energy strategy as Link light rail expands to include Lynnwood Link, Federal Way, and East Link extensions among others. As Link light rail moves farther into PSE territory, the agency's electricity use becomes more greenhouse gas intensive because these utilities have a smaller percentage of hydropower and renewables in their portfolio.

In the next two to three years, staff will continue to pursue utility products such as this and return to the Board to provide a long-term strategy for making the agency's facilities and Link light rail run on renewable energy.

FISCAL INFORMATION

Under the proposed action, the Agency agrees to purchase 100 percent of PSE provided electricity through the Green Direct program for all existing Sound Transit facilities currently in service.

- Participation in the Green Direct program does not require any up-front capital investment.
- Furthermore, for both phases of the program annual rate increases during the program period are fixed for the electric production portion of the bill, which is currently 42% of charges. This reduces exposure to utility price increases for this portion of rates (i.e., this rate does not include costs associated with customer service, connection to the electrical grid, or other indirect costs).

Green Direct Phase 2 enrollment will have the following fiscal impacts:

- When the Green Direct – Phase 2 program begins in 2021, the electric rates for the newly enrolled 32 accounts are expected to be approximately 5 percent *lower* than outside of the program.
- Green Direct rates for Phase 2 are forecasted to remain lower than forecast electricity prices over the duration of the 10-year term of the agreement.

- PSE rates are expected to increase between 2.4 percent and 5.6 percent annually from 2021-2030 based on historic growth rates and regional price forecasts while Green Direct rates increase at a fixed 2.0 percent growth rate.
- As long as PSE rates increase by more than 1.2 percent over the 10-year term of the Green Direct – Phase 2 agreement, Sound Transit will save money. If rate increases are 4.3 percent annually over the 10-year program, consistent with the medium scenario for regional electricity price increases from the Northwest Power and Conservation Council, savings are estimated at \$196,000 in 2021 dollars.

The amendment to the Green Direct Phase 1 agreement will have the following impacts:

- Green Direct rates for Phase 1 are initially 4% higher than standard current rates, but are forecasted to save money over the duration of the 10-year term of the agreement.
- Under the amended agreement, the Phase 1 Green Direct rate will increase at a significantly lower fixed percent annual growth rate, .55% instead of 2%. As a result, savings are projected to start accruing in 2021 as opposed to 2023. Additionally, the savings is estimated to be up to \$267,000 greater than the initial agreement if rates increase 4.3 annually, consistent with the medium scenario for regional electricity price increases from the Northwest Power and Conservation Council.

Both Green Direct agreements are expected to mitigate some of the risk of rising electricity rates and potentially deliver lower costs for facility operations in Puget Sound Energy's service territory. The total amount of electricity purchased through both Green Direct phases is 9.1 million kilowatt hours annually. Based on 2017 utility billing, the agency's total projected electricity costs for 2018 are expected to be \$4.5 million.

SMALL BUSINESS/DBE PARTICIPATION

Not applicable to this action.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

A one month delay may represent a risk to participating in the Green Direct Program, as the development of the solar power installation is dependent on having enough customers to purchase the energy produced and enrollment is on a first-come, first served basis.

PRIOR BOARD/COMMITTEE ACTIONS

Motion No. M2017-11: Authorized the chief executive officer to execute a power purchase agreement with Puget Sound Energy for the Green Direct program to purchase locally produced, renewable wind power directly from Puget Sound Energy starting in 2019 for a 10-year contract term for all Puget Sound Energy electricity accounts related to the operations of Link light rail.

Motion No. M2015-06: Directed the chief executive officer to implement the Sustainability Plan – 2015 Update to continue the integration of sustainable business practices and strategies throughout the Sound Transit organization.

Motion No. M2011-40: Implemented a Sustainability Plan and continue integrating sustainable business practices and strategies throughout the Sound Transit organization.

Resolution No. R2007-12: Authorized the chief executive officer to establish a Sound Transit Sustainability Initiative.

ENVIRONMENTAL REVIEW

KH 7/19/2018

LEGAL REVIEW

JB 7/27/18

MOTION NO. M2018-91

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to (1) execute a new power purchase agreement with Puget Sound Energy (PSE) through its Green Direct – Phase 2 program to purchase locally produced renewable wind and solar power starting in 2021 with a 10-year fixed-rate contract for 32 Sound Transit electricity accounts and (2) execute an amendment letter with PSE for the Green Direct – Phase 1 program that is projected to lower Sound Transit's costs to purchase wind power for six Link light rail accounts for a 10-year fixed rate contract starting in 2019.

BACKGROUND:

Sound Transit's 2015 Sustainability Plan and the ST3 Plan commit the agency to make all facilities and all electricity carbon-neutral by 2030.

In order to meet this commitment, the agency is pursuing three main implementation strategies:

1. Continue to invest in energy efficiency for existing and new facilities.
2. Purchase renewable energy through alternative means, such as power purchase agreements like the Green Direct program.
3. Develop on-site renewable energy installations.

Green Direct program overview

The first power purchase agreement with PSE was approved by the Board in January 2017 through Motion No. M2017-11. The 2017 agreement enrolled six Link light rail accounts for a 10-year contract term to purchase locally produced, wind power. PSE refers to this initial power purchase agreement as Green Direct – Phase 1. The Green Direct – Phase 2 program is another power purchase agreement opportunity that allows Sound Transit to directly purchase locally produced, renewable wind and solar power from PSE.

The Green Direct – Phase 2 agreement with PSE commits the agency today (2018) to purchase electricity for PSE accounts from locally-produced solar and wind power sources.

- The agreement includes a 10 year fixed rate contract beginning in 2021 for 32 accounts that will be enrolled in this program.
- When the program is executed in 2021, the electricity rates will be approximately five percent lower than current PSE commercial rates.
- These 32 PSE accounts consume approximately 2.4 million kilowatt hours of electricity annually and account for 26% of the agency's consumption from PSE and 5% of overall electricity consumption.
- If this motion is approved, all Sound Transit PSE accounts will be enrolled in the Green Direct program.

Entering into the Green Direct – Phase 2 agreement also makes Sound Transit eligible for an amendment to the Green Direct – Phase 1 agreement that lowers the cost of that existing agreement.

- The Phase 1 power purchase agreement powers six Link light rail accounts already enrolled in the Green Direct program from locally-produced wind power sources.
- These six PSE accounts consume approximately 6.7 million kilowatt hours of electricity annually and account for 73% of the agency's consumption from PSE and 13% of overall electricity consumption.

- Under the amended agreement, the Phase 1 Green Direct rate will increase at a significantly lower fixed percent annual growth rate, .55% instead of 2%. As a result, savings are projected to start accruing in 2021 as opposed to 2023. Additionally, the savings is estimated to be up to \$267,000 greater than the initial agreement if rates increase 4.3 annually, consistent with the medium scenario for regional electricity price increases from the Northwest Power and Conservation Council.

Both Green Direct agreements are expected to mitigate some of the risk of rising electricity rates and potentially deliver lower costs for facility operations in Puget Sound Energy's service territory. The total amount of electricity purchased through both Green Direct phases is 9.1 million kilowatt hours annually. Based on 2017 utility billing, the agency's total projected electricity costs for 2018 are expected to be \$4.5 million.

There will be no impact on operations and the agreement will not alter the security of electricity provision to these accounts. The wind and solar power projects that Sound Transit's agreement supports will add renewable energy to PSE's production portfolio - and allow Sound Transit to claim the benefits of that production.

Green Direct program benefits

Currently, Sound Transit's electricity is powered by Seattle City Light (SCL), Puget Sound Energy (PSE), Snohomish PUD (SnoPUD), Tacoma Public Utilities (TPU) and Lakewood Light and Power. Of these utilities, PSE's electricity was responsible for 18 percent of consumption and 96 percent of electricity-related greenhouse gas emissions in 2017. If this motion is approved, all Sound Transit PSE accounts will be enrolled in the Green Direct program.

Transitioning electricity use to renewable energy via both Green Direct phases will save utility costs and further reduce the agency's overall environmental footprint. Entering into this agreement will allow Sound Transit to reduce its greenhouse gas emissions from electricity by 96 percent. Reducing the greenhouse gas emissions and air pollution associated with facility energy use improves the regional air quality benefits of people switching from driving to transit and helps green one of our region's most fossil fuel dependent utilities.

PSE is pursuing the development of new solar power projects for Phase 2 based on the early commitment of businesses and local governments, such as Sound Transit. These projects only received approval from PSE after sufficient demand had been committed to participation by local businesses and governments. The Green Direct – Phase 2 solar power project will be sited in south central Washington, providing clean technology jobs to the region. Permits have been approved for the project.

Considerations and next steps

If the Green Direct program's solar power project is delayed and solar power is not available at the anticipated commencement date, the contract commencement and term will be delayed accordingly. If PSE determines in its own discretion that the project will not produce adequate power to meet Sound Transit's needs, it may terminate the contract with no liability to Sound Transit. If in any given year the renewable energy produced by the solar power project is inadequate to meet subscribers' needs, the deficiency will be distributed pro-rata among subscribers to the program, and PSE will purchase renewable energy credits on behalf of subscribers in an amount up to the net amount of funds to be collected under the contract.

In order to meet the agency's commitment to expand the use of renewable energy and make all facilities and electricity carbon-neutral by 2030, the agency will need to recalibrate its carbon neutral and renewable energy strategy as Link light rail expands to include Lynnwood Link, Federal Way, and East Link extensions among others. As Link light rail moves farther into PSE territory, the agency's electricity use becomes more greenhouse gas intensive because these utilities have a smaller percentage of hydropower and renewables in their portfolio.

In the next two to three years, staff will continue to pursue utility products such as this and return to the Board to provide a long-term strategy for making the agency's facilities and Link light rail run on renewable energy.

MOTION:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to (1) execute a new power purchase agreement with Puget Sound Energy (PSE) through its Green Direct – Phase 2 program to purchase locally produced renewable wind and solar power starting in 2021 with a 10-year fixed-rate contract for 32 Sound Transit electricity accounts and (2) execute an amendment letter with PSE for the Green Direct – Phase 1 program that is projected to lower Sound Transit's costs to purchase wind power for six Link light rail accounts for a 10-year fixed rate contract starting in 2019.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on August 23, 2018.



John Marchione
Board Vice Chair

ATTEST:



Kathryn Flores
Board Administrator