



EB-2024-0096

Deferral Account Application  
Technical Conference

June 24, 2024

# The Project

PowerShare is Essex Powerlines' Distribution System Operator Pilot Project.

Goals of the Project include testing a Local Energy Market to understand how Distributed Energy Resources can play a role in alleviating local constraints.

One of the activities in the Local Energy Market is paying local DER Owners for Flexibility and those payments could be made at prices higher than HOEP.

# Project Funding

Project Funding from the IESO includes up to 50% of project activities and costs.

Including in the project scope and budget are payments for local energy and capacity. This means payments for generated energy or curtailment to satisfy local energy constraints in place of energy or capacity being purchased through the IESO Administered Market.

50% of these payments are funded by the IESO through the Contribution Agreement.

# Market Design

PowerShare aims to test a DSO model for utilities using a market design for purchasing services from distribution-connected customers to meet grid needs.

Bids and offers are matched based on location, quantity and price.

# Deferral Accounts

Essex Powerlines requests permission to establish a deferral account and two sub-accounts in which to accrue the difference between amounts paid for flexibility that exceed HOEP and project funding.

The maximum amount that could accumulate in these accounts during the pilot project is estimated to be approximately \$555k, based on an estimated average HOEP of \$38.72/MWh.

# Progress and Outcomes

The DSO Local Energy Market has opened to permit initial bids and offers to test the platform.

Additional participants have completed the on-boarding process and trading is expected to ramp up in the coming weeks.

Essex Powerlines requests disposition at the end of the pilot through a rate rider.

# Local Capacity Payments

Example: A DER owner commits to make 2MWh/day of flexibility available to EPLC for a period of 5 days. The contracted price is \$39.90/MWh.

The total payment to the DER owner for that commitment period is  $\$39.90 \times 2 \text{ MWh/day} \times 5 \text{ days} = \$399.00$ .

# Local Capacity Payments

## Accounting Entries

- |  |          |          |
|--|----------|----------|
| 1. DR 4705 – Expense Account                       | \$399.00 |          |
| CR 2200 – Accounts Payable                         |          | \$399.00 |
| ~to record payment to DER owner                    |          |          |
| 2. DR 1100 – Accounts Receivable                   | \$199.50 |          |
| CR – 4705 – Expense Account                        |          | \$199.50 |
| ~to record recovery of 50% through project funding |          |          |
| 3. DR 150X – new DVA                               | \$199.50 |          |
| CR – 4705 – Expense Account                        |          | \$199.50 |
| ~to move balance to DVA account                    |          |          |



# Local Energy Payments

Example: A DER owner who has contracted capacity into the local energy market is activated to supply energy. EPLC activates the DER owner to deliver 4 MWh of energy. The contracted price is \$239.40/MWh.

The total payment to the DER owner for that energy is  $\$239.40 \times 4 \text{ MWh} = \$957.60$ . HOEP in each of those 4 hours was \$38.72/MWh. Therefore, if that same energy were purchased through the IESO wholesale market it would have cost  $\$38.72 \times 4 = \$154.88$ .

# Local Energy Payments

## Accounting Entries

- |   |          |          |
|---|----------|----------|
| 1. DR 4705 – Cost of Power  | \$957.60 |          |
| CR 2200 – Accounts Payable  |          | \$957.60 |
| ~to record payment to DER owner   |          |          |
| 2. DR 1100 – Accounts Receivable  | \$478.80 |          |
| CR – 4705 – Cost of Power   |          | \$478.80 |
| ~to record recovery of 50% through project funding                          |          |          |
| 3. DR 150X – new DVA  | \$323.92 |          |
| CR – 4705 – Cost of Power   |          | \$323.92 |
| ~to recognize HOEP on local energy purchase and move balance to DVA account |          |          |

# Local Curtailment Payments

Example: A participant who has contracted curtailment in the local energy market is activated to reduce load. EPLC activates the participant to reduce their load by 2 MW/h over a 2-hour period. The contracted price is \$239.40/MWh.

The total payment to the participant for that curtailment is  $\$239.40 \times 2 \text{ MWh} \times 2 \text{ hours} = \$957.60$ .

# Local Curtailment Payments

## Accounting Entries

- |  |          |          |
|--|----------|----------|
| 1. DR 4705 – Cost of Power                         | \$957.60 |          |
| CR 2200 – Accounts Payable                         |          | \$957.60 |
| ~to record payment to participant                  |          |          |
| <br>   |          |          |
| 2. DR 1100 – Accounts Receivable                   | \$478.80 |          |
| CR – 4705 – Cost of Power                          |          | \$478.80 |
| ~to record recovery of 50% through project funding |          |          |
| <br>   |          |          |
| 3. DR 150X – new DVA                               | \$478.80 |          |
| CR – 4705 – Cost of Power                          |          | \$478.80 |
| ~ to move balance to DVA account                   |          |          |