STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 1 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## Capacity Market Value Cost Recovery - ALTERNATIVE 1 Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price: \$\\$ 1.40 \ \rangle \text{KW}
---

Total of Alternative 1 VDER Projects' Net Injections at hour of NYISO Peak: 22,217 kW

Total Alternative 1 Capacity Market Value Cost to Recover: \$ 31,067.19

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$12,734.44
SC1C	0.81%	\$251.64
SC2ND	2.54%	\$789.11
SC2D	14.46%	\$4,492.32
SC3-Secondary	13.34%	\$4,144.36
SC3-Primary	5.15%	\$1,599.96
SC3-Subtransmission/Transmission	1.65%	\$512.61
SC3A-Secondary/Primary	2.98%	\$925.80
SC3A-Sub Transmission	3.75%	\$1,165.02
SC3A-Transmission	14.31%	\$4,445.72
Streetlighting	0.02%	\$6.21
Total	100.00%	\$31,067.19

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00002
SC1C	18,507,884	\$0.00001
SC2ND	44,588,123	\$0.00002
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.01
SC3-Primary	310,103	\$0.01
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.01
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 2 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## Capacity Market Value Cost Recovery - ALTERNATIVE 2 Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price	: {	5 1.40	/kW
---	-----	--------	-----

Total of Alternative 2 VDER Projects' Net Injections at hour of NYISO Peak: 16,312 kW

Total Alternative 2 Capacity Market Value Cost to Recover: \$ 22,809.75

### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$9,349.72
SC1C	0.81%	\$184.76
SC2ND	2.54%	\$579.37
SC2D	14.46%	\$3,298.29
SC3-Secondary	13.34%	\$3,042.82
SC3-Primary	5.15%	\$1,174.70
SC3-Subtransmission/Transmission	1.65%	\$376.36
SC3A-Secondary/Primary	2.98%	\$679.73
SC3A-Sub Transmission	3.75%	\$855.37
SC3A-Transmission	14.31%	\$3,264.08
Streetlighting	0.02%	\$4.56
Total	100.00%	\$22,809.75

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00001
SC1C	18,507,884	\$0.00001
SC2ND	44,588,123	\$0.00001
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 3 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## Capacity Market Value Cost Recovery - ALTERNATIVE 3 Rule 40.3.2.1

Total Alternative 3 Capacity Market Value Cost to Recover: \$	75.51
Total of Alternative 3 VDER Projects' Net Injections at hour of NYISO Peak:	54 kW
Average Monthly NYISO Spot Auction Capacity Price: \$	1.40 /kW

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$30.95
SC1C	0.81%	\$0.61
SC2ND	2.54%	\$1.92
SC2D	14.46%	\$10.92
SC3-Secondary	13.34%	\$10.07
SC3-Primary	5.15%	\$3.89
SC3-Subtransmission/Transmission	1.65%	\$1.25
SC3A-Secondary/Primary	2.98%	\$2.25
SC3A-Sub Transmission	3.75%	\$2.83
SC3A-Transmission	14.31%	\$10.81
Streetlighting	0.02%	\$0.02
Total	100.00%	\$75.51

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00000
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00000
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: APRIL 30, 2021 STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 4 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## Capacity Out of Market Value Cost Recovery Rule 40.3.2.2

VDER Value Stack Capacity Market Value (Rule 40.3.2.1): \$ 53,952.45

Total VDER Value Stack Capacity Component Paid to Projects: \$\\$10,093.67\$

**Total Capacity Out of Market Value Cost to Recover:** \$ (43,858.78)

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	41.99%	-\$18,415.66
SC1C	0.00%	\$0.00
SC2ND	17.04%	-\$7,474.12
SC2D	13.12%	-\$5,755.31
SC3	21.54%	-\$9,448.74
SC3A	5.63%	-\$2,470.19
Streetlighting	0.67%	-\$294.77
Total	100.00%	-\$43,858,78

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	-\$0.00003
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	-\$0.00017
		<u>\$/kW</u>
SC2D	924,994	-\$0.01
SC3	1,178,252	-\$0.01
SC3A	1,364,199	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	-\$0.00002

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: APRIL 30, 2021 STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 5 OF 12

# Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

# Environmental Market Value Cost Recovery<sup>1</sup> Rule 40.3.2.3

Total Environmental Market Value Cost to Recover:	\$ 350,816.00	1
Total of VDER Projects' Net Injections during recovery month:	15,710,524	kWh
NYSERDA Tier 1 REC rate in effect for the recovery month <sup>2</sup> :	\$ 0.02233	/kWł

#### Notes:

- 1. The Environmental Market Value costs are recovered annually as part of the Clean Energy Standard Supply charge as specified in Rule 46.3.5.
- 2. NYSERDA's 2021 Quarter 1 Tier 1 REC Sale Price of \$22.33/MWh.

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: APRIL 30, 2021 STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 6 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

### Environmental Out of Market Value Cost Recovery Rule 40.3.2.4

VDER Value Stack Environmental Market Value (Rule 40.3.2.3): \$ 350,816.00

Total VDER Value Stack Environmental Component Paid to Projects: \$\\$425,645.22

Total Environmental Out of Market Value Cost to Recover: \$ 74,829.22

### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	40.78%	\$30,513.59
SC1C	0.00%	\$0.00
SC2ND	13.20%	\$9,877.01
SC2D	16.58%	\$12,405.84
SC3	24.62%	\$18,422.93
SC3A	4.27%	\$3,195.38
Streetlighting	0.55%	\$414.46
Total	100.00%	\$74,829.22

#### Rate Design by Forecast

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00004
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00022
		<u>\$/<b>kW</b></u>
SC2D	924,994	\$0.01
SC3	1,178,252	\$0.02
SC3A	1,364,199	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00003

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 7 OF 12

# <u>Value Stack Cost Recovery Mechanisms</u> VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## **DRV Cost Recovery Rule 40.3.2.5**

Total VDER Value Stack DRV Component Paid to **Secondary/Primary** Projects: \$\\$12,169.08

#### **Secondary/Primary Cost Allocation**

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$6,893.78
SC1C	1.18%	\$143.60
SC2ND	3.30%	\$401.58
SC2D	18.62%	\$2,265.88
SC3-Secondary	18.51%	\$2,252.50
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$90.05
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$121.69
Total	100.00%	\$12,169.08

#### **Secondary/Primary Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00001
SC1C	18,507,884	\$0.00001
SC2ND	44,588,123	\$0.00001
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00001

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 8 OF 12

# <u>Value Stack Cost Recovery Mechanisms</u> <u>VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)</u>

## **DRV Cost Recovery Rule 40.3.2.5**

Total VDER Value Stack DRV Component Paid to **Subtransmission/Transmission** Projects: \$ 282.11

### **Subtransmission/Transmission Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$115.64
SC1C	0.81%	\$2.29
SC2ND	2.54%	\$7.17
SC2D	14.46%	\$40.79
SC3-Secondary	13.34%	\$37.63
SC3-Primary	5.15%	\$14.53
SC3-Subtransmission/Transmission	1.65%	\$4.65
SC3A-Secondary/Primary	2.98%	\$8.41
SC3A-Sub Transmission	3.75%	\$10.58
SC3A-Transmission	14.31%	\$40.37
Streetlighting	0.02%	\$0.06
Total	100.00%	\$282.11

#### **Subtransmission/Transmission Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00000
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00000
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 9 OF 12

## <u>Value Stack Cost Recovery Mechanisms</u> VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## **LSRV Cost Recovery Rule 40.3.2.6**

Total VDER Value Stack LSRV Component Paid to Secondary/Primary Projects: \$ 1,695.48

#### **Secondary/Primary Cost Allocation**

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$960.49
SC1C	1.18%	\$20.01
SC2ND	3.30%	\$55.95
SC2D	18.62%	\$315.70
SC3-Secondary	18.51%	\$313.83
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$12.55
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$16.95
Total	100.00%	\$1,695.48

#### **Secondary/Primary Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00000
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00000
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 10 OF 12

## Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## **LSRV Cost Recovery Rule 40.3.2.6**

Total VDER Value Stack LSRV Component Paid to Subtransmission/Transmission Projects: \$ -

### **Subtransmission/Transmission Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$0.00
SC1C	0.81%	\$0.00
SC2ND	2.54%	\$0.00
SC2D	14.46%	\$0.00
SC3-Secondary	13.34%	\$0.00
SC3-Primary	5.15%	\$0.00
SC3-Subtransmission/Transmission	1.65%	\$0.00
SC3A-Secondary/Primary	2.98%	\$0.00
SC3A-Sub Transmission	3.75%	\$0.00
SC3A-Transmission	14.31%	\$0.00
Streetlighting	0.02%	\$0.00
Total	100.00%	\$0.00

#### Subtransmission/Transmission Rate Design by Forecast

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00000
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00000
		<u>\$/kW</u>
SC2D	924,994	\$0.00
SC3-Secondary	742,562	\$0.00
SC3-Primary	310,103	\$0.00
SC3-Subtransmission/Transmission	125,588	\$0.00
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.00
SC3A-Transmission	943,897	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,026,266	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: APRIL 30, 2021 STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 11 OF 12

# <u>Value Stack Cost Recovery Mechanisms</u> VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

### MTC Cost Recovery Rule 40.3.2.7

Total VDER Value Stack MTC Component Paid to Projects: \$\\$32,799.11

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	105.12%	\$34,478.80
SC1C	0.00%	\$0.00
SC2ND	-5.12%	-\$1,679.69
Total	100.00%	\$32,799.11

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00005
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	-\$0.00004

STATEMENT TYPE: VDER-CR WORKPAPERS FOR STATEMENT NO. 43 PAGE 12 OF 12

# Value Stack Cost Recovery Mechanisms VALUE OF DISTRIBUTED ENERGY RESOURCES (VDER)

## Community Credit Cost Recovery Rule 40.3.2.7

Total VDER Value Stack Community Credit Component Paid to Projects: \$ 248,584.03

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	47.08%	\$117,037.05
SC1C	0.00%	\$0.00
SC2ND	4.12%	\$10,253.40
SC2D	19.30%	\$47,985.34
SC3-Secondary	16.83%	\$41,834.68
SC3-Primary	9.72%	\$24,162.22
SC3-Subtransmission/Transmission	1.92%	\$4,770.34
SC3A-Secondary/Primary	0.00%	\$0.00
SC3A-Sub Transmission	0.99%	\$2,471.02
SC3A-Transmission	0.00%	\$0.00
Streetlighting	0.03%	\$69.98
Total	100.00%	\$248,584.03

#### **Rate Design by Forecast**

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	731,241,193	\$0.00016
SC1C	18,507,884	\$0.00000
SC2ND	44,588,123	\$0.00023
		<u>\$/kW</u>
SC2D	924,994	\$0.05
SC3-Secondary	742,562	\$0.06
SC3-Primary	310,103	\$0.08
SC3-Subtransmission/Transmission	125,588	\$0.04
SC3A-Secondary/Primary	166,318	\$0.00
SC3A-Sub Transmission	253,984	\$0.01
SC3A-Transmission	943,897	\$0.00
Streetlighting	12,026,266	\$0.00001