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

# Capacity Market Value Cost Recovery - ALTERNATIVE 1 Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price: \$ 1.81 /kW
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Total of Alternative 1 VDER Projects' Net Injections at hour of NYISO Peak: 618 kW

Total Alternative 1 Capacity Market Value Cost to Recover: \$ 1,120.46

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$459.28
SC1C	0.81%	\$9.08
SC2ND	2.54%	\$28.46
SC2D	14.46%	\$162.02
SC3-Secondary	13.34%	\$149.47
SC3-Primary	5.15%	\$57.70
SC3-Subtransmission/Transmission	1.65%	\$18.49
SC3A-Secondary/Primary	2.98%	\$33.39
SC3A-Sub Transmission	3.75%	\$42.02
SC3A-Transmission	14.31%	\$160.34
Streetlighting	0.02%	\$0.22
Total	100.00%	\$1,120.46

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

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

# <u>Capacity Market Value Cost Recovery - ALTERNATIVE 2</u> Rule 40.3.2.1

Total Alternative 2 Capacity Market Value Cost to Recover:	\$ -	
Total of Alternative 2 VDER Projects' Net Injections at hour of NYISO Peak:	-	kW
Average Monthly NYISO Spot Auction Capacity Price	\$ 1.81	/kW

#### **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

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

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

# <u>Capacity Market Value Cost Recovery - ALTERNATIVE 3</u> Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price:  Total of Alternative 3 VDER Projects' Net Injections at hour of NYISO Peak:	]/kW ] <sub>k</sub> w
Total Alternative 3 Capacity Market Value Cost to Recover:	]

#### **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

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: JUNE 28, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 21 PAGE 4 OF 12

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

# Capacity Out of Market Value Cost Recovery Rule 40.3.2.2

VDER Value Stack Capacity Market Value (Rule 40.3.2.1): \$\\$1,120.46\$

Total VDER Value Stack Capacity Component Paid to Projects: \$ 1,532.42

Total Capacity Out of Market Value Cost to Recover: \$ 411.96

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	67.85%	\$279.51
SC2D	5.79%	\$23.84
SC3	26.36%	\$108.60
SC3A	0.00%	\$0.00
Total	100.00%	\$411.96

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3	1,730,857	\$0.00
SC3A	1,837,347	\$0.00

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: JUNE 28, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 21 PAGE 5 OF 12

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

## Environmental Market Value Cost Recovery Rule 40.3.2.3

Environmental Component rate in effect for the recovery month: \$\\ 0.02243\]/kWh

Total of VDER Projects' Net Injections during recovery month: \$\\ 867,252\] kWh

Total Environmental Market Value Cost to Recover: \$\\ 19,452.46\]

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: JUNE 28, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 21 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): \$ 19,452.46

Total VDER Value Stack Environmental Component Paid to Projects: \$ 23,096.26

Total Environmental Out of Market Value Cost to Recover: \$\\$3,643.80

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	78.06%	\$2,844.19
SC2D	5.86%	\$213.47
SC3	16.09%	\$586.13
SC3A	0.00%	\$0.00
Total	100.00%	\$3,643,80

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00005
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3	1,730,857	\$0.00
SC3A	1,837,347	\$0.00

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# <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 **Secondary/Primary** Projects: \$ 3,407.95

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$1,930.60
SC1C	1.18%	\$40.21
SC2ND	3.30%	\$112.46
SC2D	18.62%	\$634.56
SC3-Secondary	18.51%	\$630.81
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$25.22
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$34.08
Total	100.00%	\$3,407,95

### Secondary/Primary Rate Design by Forecast

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

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# <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: \$ -

#### **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	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

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

# **LSRV Cost Recovery Rule 40.3.2.6**

Total VDER Value Stack LSRV Component Paid to **Secondary/Primary** Projects: \$ 511.09

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$289.53
SC1C	1.18%	\$6.03
SC2ND	3.30%	\$16.87
SC2D	18.62%	\$95.16
SC3-Secondary	18.51%	\$94.60
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$3.78
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$5.11
Total	100.00%	\$511.09

### Secondary/Primary Rate Design by Forecast

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

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# 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)	<b>Forecast</b>	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000
		<u>\$/kW</u>
SC2D	1,288,349	\$0.00
SC3-Secondary	1,166,085	\$0.00
SC3-Primary	405,619	\$0.00
SC3-Subtransmission/Transmission	159,152	\$0.00
SC3A-Secondary/Primary	251,049	\$0.00
SC3A-Sub Transmission	334,465	\$0.00
SC3A-Transmission	1,251,833	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,649,731	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: JUNE 28, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 21 PAGE 11 OF 12

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

# MTC Cost Recovery Rule 40.3.2.7

Total VDER Value Stack MTC Component Paid to Projects: \$ 17,540.03

# **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	100.00%	\$17,540.03
Total	100.00%	\$17,540.03

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00030

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: JUNE 28, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 21 PAGE 12 OF 12

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

# Community Credit Cost Recovery Rule 40.3.2.7

Total VDER Value Stack Community Credit Component Paid to Projects: \$ -

# **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	0.00%	\$0.00
Total	0.00%	\$0.00

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	980,625,486	\$0.00000
SC1C	27,251,062	\$0.00000
SC2ND	57,990,513	\$0.00000