STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 1 OF 11

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

# <u>Capacity Market Value Cost Recovery - ALTERNATIVE 1</u> Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price: \$\\$ 1.81 \rightarrow{\}/kW
---

Total of Alternative 1 VDER Projects' Net Injections at hour of NYISO Peak: 1,237 kW

Total Alternative 1 Capacity Market Value Cost to Recover: \$ 2,242.19

### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$919.07
SC1C	0.81%	\$18.16
SC2ND	2.54%	\$56.95
SC2D	14.46%	\$324.22
SC3-Secondary	13.34%	\$299.11
SC3-Primary	5.15%	\$115.47
SC3-Subtransmission/Transmission	1.65%	\$37.00
SC3A-Secondary/Primary	2.98%	\$66.82
SC3A-Sub Transmission	3.75%	\$84.08
SC3A-Transmission	14.31%	\$320.86
Streetlighting	0.02%	\$0.45
Total	100.00%	\$2,242.19

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 2 OF 11

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

# Capacity Market Value Cost Recovery - ALTERNATIVE 2 Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price: \$	1.81	/kW
Total of Alternative 2 VDER Projects' Net Injections at hour of NYISO Peak:	-	kW
Total Alternative 2 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	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 3 OF 11

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

# Capacity Market Value Cost Recovery - ALTERNATIVE 3 Rule 40.3.2.1

Average Monthly NYISO Spot Auction Capacity Price:	\$ 1.81	/kW
Total of Alternative 3 VDER Projects' Net Injections at hour of NYISO Peak:	-	kW
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	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: MAY 31, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 4 OF 11

## <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): \$ 2,242.19

Total VDER Value Stack Capacity Component Paid to Projects: \$ 769.79

Total Capacity Out of Market Value Cost to Recover: \$ (1,472.40)

### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	80.27%	-\$1,181.93
SC2D	5.35%	-\$78.82
SC3	14.37%	-\$211.64
SC3A	0.00%	\$0.00
Total	100.00%	-\$1.472.40

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	-\$0.00002
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3	1,623,054	\$0.00
SC3A	1,771,238	\$0.00

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: MAY 31, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 5 OF 11

# 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: \$\\$ 968,182 \]kWh

Total Environmental Market Value Cost to Recover: \$\\$ 21,716.32

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: MAY 31, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 6 OF 11

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

## Environmental Out of Market Value Cost Recovery Rule 40.3.2.4

VDER Value Stack Environmental Market Value (Rule 40.3.2.3): \$ 21,716.32

Total VDER Value Stack Environmental Component Paid to Projects: \$ 26,753.03

Total Environmental Out of Market Value Cost to Recover: \$ 5,036.71

### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	83.70%	\$4,215.76
SC2D	3.25%	\$163.63
SC3	13.05%	\$657.31
SC3A	0.00%	\$0.00
Total	100.00%	\$5,036.71

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00008
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3	1,623,054	\$0.00
SC3A	1,771,238	\$0.00

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 7 OF 11

## <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: \$ 2,993.55

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$1,695.85
SC1C	1.18%	\$35.32
SC2ND	3.30%	\$98.79
SC2D	18.62%	\$557.40
SC3-Secondary	18.51%	\$554.11
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$22.15
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$29.94
Total	100.00%	\$2,993.55

## Secondary/Primary Rate Design by Forecast

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 8 OF 11

### <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	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 9 OF 11

## <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: \$ 735.58

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$416.71
SC1C	1.18%	\$8.68
SC2ND	3.30%	\$24.27
SC2D	18.62%	\$136.96
SC3-Secondary	18.51%	\$136.16
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$5.44
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$7.36
Total	100.00%	\$735.58

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

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 10 OF 11

### <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 **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	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00000
		<u>\$/kW</u>
SC2D	1,194,507	\$0.00
SC3-Secondary	1,092,873	\$0.00
SC3-Primary	380,251	\$0.00
SC3-Subtransmission/Transmission	149,931	\$0.00
SC3A-Secondary/Primary	241,073	\$0.00
SC3A-Sub Transmission	320,851	\$0.00
SC3A-Transmission	1,209,313	\$0.00
		<u>\$/kWh</u>
Streetlighting	12,719,285	\$0.00000

P.S.C. 220 ELECTRICITY NIAGARA MOHAWK POWER CORPORATION INITIAL EFFECTIVE DATE: MAY 31, 2019 STATEMENT TYPE: VDER-CR WORKPAPER FOR STATEMENT NO. 20 PAGE 11 OF 11

## <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: \$ 20,479.38

## **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	0.00%	\$0.00
SC1C	0.00%	\$0.00
SC2ND	100.00%	\$20,479.38
Total	100.00%	\$20,479.38

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	839,420,911	\$0.00000
SC1C	23,327,055	\$0.00000
SC2ND	54,428,283	\$0.00038