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

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

Average Monthly N 1150 Spot Auction Capacity Frice. 5 1.40 /kv	Average Monthly NYISO Spot Auction Capacity Price: S	\$ 1.40	/kW
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Total of Alternative 1 VDER Projects' Net Injections at hour of NYISO Peak: 20,831 kW

**Total Alternative 1 Capacity Market Value Cost to Recover:** \$ 29,129.24

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$11,940.08
SC1C	0.81%	\$235.95
SC2ND	2.54%	\$739.88
SC2D	14.46%	\$4,212.09
SC3-Secondary	13.34%	\$3,885.84
SC3-Primary	5.15%	\$1,500.16
SC3-Subtransmission/Transmission	1.65%	\$480.63
SC3A-Secondary/Primary	2.98%	\$868.05
SC3A-Sub Transmission	3.75%	\$1,092.35
SC3A-Transmission	14.31%	\$4,168.39
Streetlighting	0.02%	\$5.83
Total	100.00%	\$29,129.24

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00001
SC1C	23,314,171	\$0.00001
SC2ND	49,430,948	\$0.00001
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.01
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<b>\$/kWh</b>
Streetlighting	13,072,340	\$0.00000

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### **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: \$ 1.40 /kW

Total of Alternative 2 VDER Projects' Net Injections at hour of NYISO Peak:

16,258 kW

Total Alternative 2 Capacity Market Value Cost to Recover: \$ 22,733.96

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$9,318.65
SC1C	0.81%	\$184.15
SC2ND	2.54%	\$577.44
SC2D	14.46%	\$3,287.33
SC3-Secondary	13.34%	\$3,032.71
SC3-Primary	5.15%	\$1,170.80
SC3-Subtransmission/Transmission	1.65%	\$375.11
SC3A-Secondary/Primary	2.98%	\$677.47
SC3A-Sub Transmission	3.75%	\$852.52
SC3A-Transmission	14.31%	\$3,253.23
Streetlighting	0.02%	\$4.55
Total	100.00%	\$22,733,96

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00001
SC1C	23,314,171	\$0.00001
SC2ND	49,430,948	\$0.00001
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00000

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

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

Total of Alternative 3 VDER Projects' Net Injections at hour of NYISO Peak:	88 kW
Total Alternative 3 Capacity Market Value Cost to Recover:	\$ 123.05

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$50.44
SC1C	0.81%	\$1.00
SC2ND	2.54%	\$3.13
SC2D	14.46%	\$17.79
SC3-Secondary	13.34%	\$16.42
SC3-Primary	5.15%	\$6.34
SC3-Subtransmission/Transmission	1.65%	\$2.03
SC3A-Secondary/Primary	2.98%	\$3.67
SC3A-Sub Transmission	3.75%	\$4.61
SC3A-Transmission	14.31%	\$17.61
Streetlighting	0.02%	\$0.02
Total	100.00%	\$123.05

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00000
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00000
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00000

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# 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): \$ 51,986.26

Total VDER Value Stack Capacity Component Paid to Projects: \$ 4,076.54

Total Capacity Out of Market Value Cost to Recover: \$ (47,909.72)

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	38.79%	-\$18,582.59
SC1C	-0.34%	\$162.98
SC2ND	11.92%	-\$5,710.11
SC2D	15.94%	-\$7,639.15
SC3	31.97%	-\$15,315.96
SC3A	0.00%	\$0.00
Streetlighting	1.72%	-\$824.89
Total	100.00%	-\$47,909,72

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	-\$0.00002
SC1C	23,314,171	\$0.00001
SC2ND	49,430,948	-\$0.00012
		<u>\$/kW</u>
SC2D	1,028,289	-\$0.01
SC3	1,282,348	-\$0.01
SC3A	1,394,535	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	-\$0.00006

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

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

NYSERDA Tier 1 REC rate in effect for the recovery month <sup>2</sup> :	\$	0.02163	/kWh
Total of VDER Projects' Net Injections during recovery month:		6,626,665	kWh
Total Environmental Market Value Cost to Recover:	S	143,316,69	ĺ

#### 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 alternative compliance payment (ACP) price, less 10% administrative adder, used as proxy until quarterly auction clears.

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## <u>Value Stack Cost Recovery Mechanisms</u> **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): \$ 143,316.69

Total VDER Value Stack Environmental Component Paid to Projects: \$ 175,787.12

Total Environmental Out of Market Value Cost to Recover: \$\\$32,470.43

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	37.41%	\$12,146.67
SC1C	-0.15%	-\$48.44
SC2ND	7.57%	\$2,457.04
SC2D	15.81%	\$5,133.61
SC3	37.07%	\$12,037.15
SC3A	0.79%	\$257.01
Streetlighting	1.50%	\$487.39
Total	100.00%	\$32,470,43

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00001
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00005
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3	1,282,348	\$0.01
SC3A	1,394,535	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00004

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## <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: \$ 7,089.73

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$4,016.33
SC1C	1.18%	\$83.66
SC2ND	3.30%	\$233.96
SC2D	18.62%	\$1,320.11
SC3-Secondary	18.51%	\$1,312.31
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$52.46
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$70.90
Total	100.00%	\$7,089.73

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

Service Class (with Voltage Delivery Level)	Forecast	<b>\$/kWh</b>
SC1	921,160,464	\$0.00000
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00000
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00001

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# <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 **Subtransmission/Transmission** Projects: \$ 564.22

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

Service Class (with Voltage Delivery Level)	1CP Allocator	
SC1	40.99%	\$231.27
SC1C	0.81%	\$4.57
SC2ND	2.54%	\$14.33
SC2D	14.46%	\$81.59
SC3-Secondary	13.34%	\$75.27
SC3-Primary	5.15%	\$29.06
SC3-Subtransmission/Transmission	1.65%	\$9.31
SC3A-Secondary/Primary	2.98%	\$16.81
SC3A-Sub Transmission	3.75%	\$21.16
SC3A-Transmission	14.31%	\$80.74
Streetlighting	0.02%	\$0.11
Total	100.00%	\$564.22

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

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00000
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00000
		<u>\$/<b>kW</b></u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00000

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# <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: \$ 2,034.42

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

Service Class (with Voltage Delivery Level)	NCP Allocator	
SC1	56.65%	\$1,152.50
SC1C	1.18%	\$24.01
SC2ND	3.30%	\$67.14
SC2D	18.62%	\$378.81
SC3-Secondary	18.51%	\$376.57
SC3-Primary	0.00%	\$0.00
SC3-Subtransmission/Transmission	0.00%	\$0.00
SC3A-Secondary/Primary	0.74%	\$15.05
SC3A-Sub Transmission	0.00%	\$0.00
SC3A-Transmission	0.00%	\$0.00
Streetlighting	1.00%	\$20.34
Total	100.00%	\$2,034,42

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

Service Class (with Voltage Delivery Level)	Forecast	<b>\$/kWh</b>
SC1	921,160,464	\$0.00000
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00000
		<u>\$/kW</u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00000

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# <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 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	921,160,464	\$0.00000
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00000
		<u>\$/<b>kW</b></u>
SC2D	1,028,289	\$0.00
SC3-Secondary	811,325	\$0.00
SC3-Primary	336,345	\$0.00
SC3-Subtransmission/Transmission	134,679	\$0.00
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
		<u>\$/kWh</u>
Streetlighting	13,072,340	\$0.00000

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

### MTC Cost Recovery Rule 40.3.2.7

Total VDER Value Stack MTC Component Paid to Projects: \$\\$16,360.68\$

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	94.04%	\$15,384.99
SC1C	0.00%	\$0.00
SC2ND	5.96%	\$975.69
Total	100.00%	\$16,360.68

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00002
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00002

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## <u>Value Stack Cost Recovery Mechanisms</u> 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: \$\\ 96,797.52

#### **Cost Allocation**

Service Class (with Voltage Delivery Level)	Allocator	
SC1	45.86%	\$44,395.21
SC1C	0.00%	\$0.00
SC2ND	5.05%	\$4,883.50
SC2D	19.67%	\$19,044.14
SC3-Secondary	14.44%	\$13,976.41
SC3-Primary	12.03%	\$11,645.69
SC3-Subtransmission/Transmission	1.72%	\$1,668.44
SC3A-Secondary/Primary	0.00%	\$0.00
SC3A-Sub Transmission	1.18%	\$1,142.15
SC3A-Transmission	0.00%	\$0.00
Streetlighting	0.04%	\$41.98
Total	100.00%	\$96,797.52

Service Class (with Voltage Delivery Level)	Forecast	<u>\$/kWh</u>
SC1	921,160,464	\$0.00005
SC1C	23,314,171	\$0.00000
SC2ND	49,430,948	\$0.00010
		<u>\$/kW</u>
SC2D	1,028,289	\$0.02
SC3-Secondary	811,325	\$0.02
SC3-Primary	336,345	\$0.03
SC3-Subtransmission/Transmission	134,679	\$0.01
SC3A-Secondary/Primary	171,262	\$0.00
SC3A-Sub Transmission	261,991	\$0.00
SC3A-Transmission	961,283	\$0.00
Streetlighting	13,072,340	\$0.00000