

1 Individual Customer Charge

2 An individual customer charge is proposed for the large service, universities,
3 manufacturing, and special service rate schedules: (5B, 15B, 30B, 33B, 35B, and 36B).
4 These rate schedules currently have from one to four customers each. Each customer
5 served by these rate schedules will have a specific customer charge based on their
6 percentage of the total rate schedule demand.

7

$$\text{Individual Customer Charge} \left(\frac{\$}{\text{bill}} \right)$$

$$= \text{rate schedule billing requirement} (\$)$$

$$\times \frac{\text{forecasted customer demand (kW)}}{\text{forecasted rate schedule demand (kW)}}$$

8

9 Block Customer Charge

10 Block customer charges are proposed for the residential 1A rate schedule. This rate
11 schedule has the largest number of customers and does not have demand metering. The
12 1A rate schedule has 3 energy blocks. The proposed charge method follows the existing
13 usage blocks and utilizes a distinct charge for the first and third blocks.

14 block₁ customer charge is applicable to all customers regardless of net usage.

15 block₃ customer charge is applicable to customers who use energy in block three.

16

block_n customer charge

$$= \frac{\text{rate schedule billing requirement (\$)}}{\text{forecasted block}_n \text{ customers}} \\ \times \frac{\text{forecasted block}_n \text{ energy}}{\text{forecasted rate schedule energy}}$$

$$\text{Customer Charge} \left(\frac{\$}{\text{bill}} \right) = \sum_{n=1,3} \text{applicable block}_n \text{ customer charge}$$

1

2 **Demand Charge**

3 A demand charge is proposed for general power and large power rate schedules (3B, 3D,
4 3C, 3E, and 4B). The same demand charge is applied to each customer served by the rate
5 schedule. These rate schedules have from hundreds to thousands of customers each and
6 have demand metering.

7

$$\text{Demand Charge} \left(\frac{\$}{kW} \right) = \frac{\text{rate schedule billing requirement (\$)}}{\text{forecasted rate schedule demand (kW)}}$$

8

9 **Light Charge**

10 A light charge is proposed for the lighting rate schedules (6 and 20). These rate
11 schedules have thousands of accounts and do not typically have metering. Every
12 account served by one of these rate schedules has the same unit charge.

13

$$\text{Light Charge (\$)} = \frac{\text{rate schedule billing requirement (\$)}}{\text{forecasted rate schedule light count}}$$

14

1 The rate schedule billing requirement is the ETA cost allocated to the rate
2 schedule as described in PNM Exhibit MJS-4.

3

4 The forecasted rate schedule demand is based on the twelve-month forecast for
5 the recovery period.

6

PNM
Four Corners Power Plant Adandonment with Scenario 1
Net impact of Securitization and Replacement

		[A]	[B]	[C]	[D]	[E]	[F]
							A+B+C+D+E
Line	Consolidated Customer Class	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 1 Non Fuel (\$)	Scenario 1 Net Fuel Impact (\$)	Net Impact (\$)
1	1 - Residential	(\$31,846,944)	\$9,176,849	(\$4,343,582)	\$6,977,023	(\$8,360,653)	(\$28,397,307)
2	2 - Small Power	(\$6,760,203)	\$1,947,985	(\$922,019)	\$1,481,024	(\$2,518,668)	(\$6,771,881)
3	3B - General Power	(\$9,014,754)	\$2,597,644	(\$1,229,516)	\$1,974,951	(\$4,487,145)	(\$10,158,820)
4	3C - General Power Low LF	(\$1,267,800)	\$365,323	(\$172,914)	\$277,749	(\$460,389)	(\$1,258,031)
5	4B - Large Power	(\$5,294,900)	\$1,525,751	(\$722,168)	\$1,160,006	(\$2,540,062)	(\$5,871,373)
6	5B - Lg. Svc. (8 MW)	(\$277,709)	\$80,023	(\$37,876)	\$60,840	(\$103,084)	(\$277,806)
7	10 - Irrigation	(\$186,542)	\$53,753	(\$25,442)	\$40,868	(\$55,855)	(\$173,219)
8	11B - Wtr/Swg Pumping	(\$467,716)	\$134,775	(\$63,791)	\$102,467	(\$412,461)	(\$706,727)
9	15B - Universities 115 kV	(\$288,607)	\$83,163	(\$39,363)	\$63,228	(\$193,514)	(\$375,093)
10	30B - Manuf. (30 MW)	(\$1,529,104)	\$440,619	(\$208,553)	\$334,996	(\$996,627)	(\$1,958,670)
11	33B - Lg. Svc. (Station Power)	(\$12,433)	\$3,583	(\$1,696)	\$2,724	(\$9,136)	(\$16,958)
12	35B - Lg. Svc. (3 MW)	(\$868,051)	\$250,133	(\$118,393)	\$190,173	(\$1,313,333)	(\$1,859,471)
13	36B - SSR - Renew. Energy Res.	(\$107,238)	\$30,901	(\$14,626)	\$23,494	(\$675,406)	(\$742,875)
14	6 - Private Lighting	(\$30,388)	\$8,756	(\$4,145)	\$6,657	(\$38,603)	(\$57,722)
15	20 - Streetlighting	(\$87,987)	\$25,354	(\$12,001)	\$19,276	(\$70,765)	(\$126,122)
		(\$58,040,376)	\$16,724,612	(\$7,916,086)	\$12,715,476	(\$22,235,701)	(\$58,752,075)

PNM
Four Corners Power Plant Adandonment with Scenario 2
Net impact of Securitization and Replacement

		[A]	[B]	[C]	[D]	[E]	[F]
							A+B+C+D+E
Line	Consolidated Customer Class	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 2 Non Fuel (\$)	Scenario 2 Net Fuel Impact (\$)	Net Impact (\$)
1	1 - Residential	(\$31,846,944)	\$9,176,849	(\$4,343,582)	\$0	\$100,423	(\$26,913,254)
2	2 - Small Power	(\$6,760,203)	\$1,947,985	(\$922,019)	\$0	\$30,253	(\$5,703,985)
3	3B - General Power	(\$9,014,754)	\$2,597,644	(\$1,229,516)	\$0	\$53,897	(\$7,592,729)
4	3C - General Power Low LF	(\$1,267,800)	\$365,323	(\$172,914)	\$0	\$5,530	(\$1,069,862)
5	4B - Large Power	(\$5,294,900)	\$1,525,751	(\$722,168)	\$0	\$30,510	(\$4,460,807)
6	5B - Lg. Svc. (8 MW)	(\$277,709)	\$80,023	(\$37,876)	\$0	\$1,238	(\$234,324)
7	10 - Irrigation	(\$186,542)	\$53,753	(\$25,442)	\$0	\$671	(\$157,561)
8	11B - Wtr/Swg Pumping	(\$467,716)	\$134,775	(\$63,791)	\$0	\$4,954	(\$391,779)
9	15B - Universities 115 kV	(\$288,607)	\$83,163	(\$39,363)	\$0	\$2,324	(\$242,482)
10	30B - Manuf. (30 MW)	(\$1,529,104)	\$440,619	(\$208,553)	\$0	\$11,971	(\$1,285,068)
11	33B - Lg. Svc. (Station Power)	(\$12,433)	\$3,583	(\$1,696)	\$0	\$110	(\$10,437)
12	35B - Lg. Svc. (3 MW)	(\$868,051)	\$250,133	(\$118,393)	\$0	\$15,775	(\$720,536)
13	36B - SSR - Renew. Energy Res.	(\$107,238)	\$30,901	(\$14,626)	\$0	\$8,113	(\$82,850)
14	6 - Private Lighting	(\$30,388)	\$8,756	(\$4,145)	\$0	\$464	(\$25,312)
15	20 - Streetlighting	(\$87,987)	\$25,354	(\$12,001)	\$0	\$850	(\$73,784)
		(\$58,040,376)	\$16,724,612	(\$7,916,086)	\$0	\$267,081	(\$48,964,769)

PNM
Four Corners Power Plant Adandonment with Scenario 1
Comparison of Existing vs Securitization and Replacement

A	B	C	D	E	F	G	H	I
							B+C+D+E+F+G	H-B

Residential Schedule 1A

Line No.	kWh Use	Existing Monthly Bill (\$)	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 1 Non Fuel (\$)	Scenario 1 Net Fuel Impact (\$)	New Monthly Bill (\$)	Net Impact (\$)
1	0	\$7.11	\$0.00	\$1.32	\$0.00	\$0.00	\$0.00	\$8.43	\$1.32
2	50	\$12.34	(\$0.50)	\$1.32	(\$0.05)	\$0.11	(\$0.13)	\$13.09	\$0.75
3	100	\$17.56	(\$1.00)	\$1.32	(\$0.09)	\$0.22	(\$0.26)	\$17.74	\$0.18
4	150	\$22.79	(\$1.50)	\$1.32	(\$0.14)	\$0.33	(\$0.39)	\$22.40	(\$0.39)
5	200	\$28.01	(\$2.00)	\$1.32	(\$0.19)	\$0.44	(\$0.53)	\$27.06	(\$0.96)
6	250	\$33.24	(\$2.50)	\$1.32	(\$0.23)	\$0.55	(\$0.66)	\$31.71	(\$1.53)
7	300	\$38.46	(\$3.00)	\$1.32	(\$0.28)	\$0.66	(\$0.79)	\$36.37	(\$2.09)
8	400	\$48.92	(\$4.00)	\$1.32	(\$0.37)	\$0.88	(\$1.05)	\$45.68	(\$3.23)
9	500	\$61.03	(\$5.00)	\$1.32	(\$0.47)	\$1.10	(\$1.31)	\$56.66	(\$4.37)
10	600	\$74.82	(\$6.00)	\$1.32	(\$0.56)	\$1.32	(\$1.58)	\$69.31	(\$5.51)
11	700	\$88.60	(\$7.00)	\$1.32	(\$0.65)	\$1.53	(\$1.84)	\$81.96	(\$6.64)
12	750	\$95.50	(\$7.50)	\$1.32	(\$0.70)	\$1.64	(\$1.97)	\$88.28	(\$7.21)
13	800	\$102.39	(\$8.00)	\$1.32	(\$0.75)	\$1.75	(\$2.10)	\$94.61	(\$7.78)
14	900	\$116.17	(\$9.00)	\$1.32	(\$0.84)	\$1.97	(\$2.36)	\$107.25	(\$8.92)
15	1,000	\$131.65	(\$10.01)	\$3.44	(\$0.94)	\$2.19	(\$2.63)	\$123.71	(\$7.94)
16	1,200	\$162.60	(\$12.01)	\$3.44	(\$1.12)	\$2.63	(\$3.15)	\$152.39	(\$10.21)
17	1,600	\$224.51	(\$16.01)	\$3.44	(\$1.50)	\$3.51	(\$4.20)	\$209.74	(\$14.76)
18	2,000	\$286.41	(\$20.01)	\$3.44	(\$1.87)	\$4.38	(\$5.25)	\$267.10	(\$19.31)

Small Power Schedule 2A

Line No.	kWh Use	Existing Monthly Bill (\$)	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 1 Non Fuel (\$)	Scenario 1 Net Fuel Impact (\$)	New Monthly Bill (\$)	Net Impact (\$)
19	0	\$15.77	\$0.00	\$2.89	\$0.00	\$0.00	\$0.00	\$18.66	\$2.89
20	500	\$71.33	(\$3.53)	\$2.89	(\$0.47)	\$0.77	(\$1.31)	\$69.69	(\$1.64)
21	1,000	\$126.90	(\$7.05)	\$2.89	(\$0.94)	\$1.54	(\$2.63)	\$120.72	(\$6.18)
22	1,500	\$182.46	(\$10.58)	\$2.89	(\$1.40)	\$2.32	(\$3.94)	\$171.75	(\$10.71)
23	2,000	\$238.03	(\$14.10)	\$2.89	(\$1.87)	\$3.09	(\$5.25)	\$222.78	(\$15.24)
24	3,000	\$349.16	(\$21.15)	\$2.89	(\$2.81)	\$4.63	(\$7.88)	\$324.84	(\$24.31)
25	4,000	\$460.28	(\$28.20)	\$2.89	(\$3.74)	\$6.18	(\$10.51)	\$426.91	(\$33.38)
26	5,000	\$571.41	(\$35.25)	\$2.89	(\$4.68)	\$7.72	(\$13.13)	\$528.97	(\$42.45)
27	7,000	\$793.67	(\$49.35)	\$2.89	(\$6.55)	\$10.81	(\$18.39)	\$733.09	(\$60.58)
28	9,000	\$1,015.93	(\$63.45)	\$2.89	(\$8.42)	\$13.90	(\$23.64)	\$937.21	(\$78.71)
29	12,000	\$1,349.31	(\$84.60)	\$2.89	(\$11.22)	\$18.53	(\$31.52)	\$1,243.39	(\$105.92)
30	15,000	\$1,682.70	(\$105.75)	\$2.89	(\$14.03)	\$23.17	(\$39.40)	\$1,549.58	(\$133.12)

PNM
Four Corners Power Plant Adandonment with Scenario 2
Comparison of Existing vs Securitization and Replacement

A	B	C	D	E	F	G	H	I
							B+C+D+E+F+G	H-B

Residential Schedule 1A

Line No.	kWh Use	Existing Monthly Bill (\$)	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 2 Non Fuel (\$)	Scenario 2 Net Fuel Impact (\$)	New Monthly Bill (\$)	Net Impact (\$)
1	0	\$7.11	\$0.00	\$1.32	\$0.00	\$0.00	\$0.00	\$8.43	\$1.32
2	50	\$12.34	(\$0.50)	\$1.32	(\$0.05)	\$0.00	\$0.00	\$13.11	\$0.77
3	100	\$17.56	(\$1.00)	\$1.32	(\$0.09)	\$0.00	\$0.00	\$17.79	\$0.23
4	150	\$22.79	(\$1.50)	\$1.32	(\$0.14)	\$0.00	\$0.00	\$22.47	(\$0.32)
5	200	\$28.01	(\$2.00)	\$1.32	(\$0.19)	\$0.00	\$0.01	\$27.15	(\$0.86)
6	250	\$33.24	(\$2.50)	\$1.32	(\$0.23)	\$0.00	\$0.01	\$31.83	(\$1.41)
7	300	\$38.46	(\$3.00)	\$1.32	(\$0.28)	\$0.00	\$0.01	\$36.51	(\$1.95)
8	400	\$48.92	(\$4.00)	\$1.32	(\$0.37)	\$0.00	\$0.01	\$45.87	(\$3.05)
9	500	\$61.03	(\$5.00)	\$1.32	(\$0.47)	\$0.00	\$0.02	\$56.90	(\$4.14)
10	600	\$74.82	(\$6.00)	\$1.32	(\$0.56)	\$0.00	\$0.02	\$69.59	(\$5.23)
11	700	\$88.60	(\$7.00)	\$1.32	(\$0.65)	\$0.00	\$0.02	\$82.29	(\$6.32)
12	750	\$95.50	(\$7.50)	\$1.32	(\$0.70)	\$0.00	\$0.02	\$88.63	(\$6.86)
13	800	\$102.39	(\$8.00)	\$1.32	(\$0.75)	\$0.00	\$0.03	\$94.98	(\$7.41)
14	900	\$116.17	(\$9.00)	\$1.32	(\$0.84)	\$0.00	\$0.03	\$107.67	(\$8.50)
15	1,000	\$131.65	(\$10.01)	\$3.44	(\$0.94)	\$0.00	\$0.03	\$124.18	(\$7.47)
16	1,200	\$162.60	(\$12.01)	\$3.44	(\$1.12)	\$0.00	\$0.04	\$152.95	(\$9.65)
17	1,600	\$224.51	(\$16.01)	\$3.44	(\$1.50)	\$0.00	\$0.05	\$210.49	(\$14.02)
18	2,000	\$286.41	(\$20.01)	\$3.44	(\$1.87)	\$0.00	\$0.06	\$268.03	(\$18.38)

Small Power Schedule 2A

Line No.	kWh Use	Existing Monthly Bill (\$)	Savings from Closure of Four Corners Power Plant Non Fuel (\$)	Energy Transition Charge Securitization (\$)	Other Costs Not Included in Energy Transition Charge (\$)	Scenario 2 Non Fuel (\$)	Scenario 2 Net Fuel Impact (\$)	New Monthly Bill (\$)	Net Impact (\$)
19	0	\$15.77	\$0.00	\$2.89	\$0.00	\$0.00	\$0.00	\$18.66	\$2.89
20	500	\$71.33	(\$3.53)	\$2.89	(\$0.47)	\$0.00	\$0.02	\$70.25	(\$1.09)
21	1,000	\$126.90	(\$7.05)	\$2.89	(\$0.94)	\$0.00	\$0.03	\$121.84	(\$5.06)
22	1,500	\$182.46	(\$10.58)	\$2.89	(\$1.40)	\$0.00	\$0.05	\$173.42	(\$9.04)
23	2,000	\$238.03	(\$14.10)	\$2.89	(\$1.87)	\$0.00	\$0.06	\$225.01	(\$13.02)
24	3,000	\$349.16	(\$21.15)	\$2.89	(\$2.81)	\$0.00	\$0.09	\$328.19	(\$20.97)
25	4,000	\$460.28	(\$28.20)	\$2.89	(\$3.74)	\$0.00	\$0.13	\$431.36	(\$28.92)
26	5,000	\$571.41	(\$35.25)	\$2.89	(\$4.68)	\$0.00	\$0.16	\$534.54	(\$36.88)
27	7,000	\$793.67	(\$49.35)	\$2.89	(\$6.55)	\$0.00	\$0.22	\$740.88	(\$52.78)
28	9,000	\$1,015.93	(\$63.45)	\$2.89	(\$8.42)	\$0.00	\$0.28	\$947.23	(\$68.69)
29	12,000	\$1,349.31	(\$84.60)	\$2.89	(\$11.22)	\$0.00	\$0.38	\$1,256.76	(\$92.55)
30	15,000	\$1,682.70	(\$105.75)	\$2.89	(\$14.03)	\$0.00	\$0.47	\$1,566.28	(\$116.41)

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
OF PUBLIC SERVICE COMPANY OF NEW)
MEXICO FOR APPROVAL OF THE)
ABANDONMENT OF THE FOUR CORNERS)
POWER PLANT AND ISSUANCE OF A)
SECURITIZED FINANCING ORDER)**

Case No. 21-_____-UT

**PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)**

Applicant)

SELF AFFIRMATION

MICHAEL J. SETTLAGE, Principal, Pricing, PNMR Services Company, upon penalty of perjury under the laws of the State of New Mexico, affirm and state: I have read the foregoing **Direct Testimony of Michael J. Settlege** and it is true and correct based on my personal knowledge and belief.

DATED this 8th day of January, 2021

/s/ Michael J. Settlege

MICHAEL J. SETTLAGE

NEW ISSUE – FULL BOOK-ENTRY ONLY

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Corporation, interest on the 2021 Bonds is not excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986. Bond Counsel is of the opinion that interest on the 2021 Bonds is exempt from State of California personal income taxes. Bond Counsel expresses no opinion regarding any other tax consequences relating to the ownership or disposition of, or the amount, accrual, or receipt of interest on, the 2021 Bonds. See "TAX MATTERS."

\$174,445,000**CALIFORNIA STATEWIDE COMMUNITIES DEVELOPMENT AUTHORITY****Taxable Refunding Revenue Bonds****(California Independent System Operator Corporation Project)****Series 2021 (Green Bonds)****Dated: Date of Delivery****Due: February 1, as shown on inside cover**

This cover page contains certain information for general reference only. It is not intended to be a summary of the security or terms of this issue. Investors are advised to read the entire Official Statement to obtain information essential to the making of an informed investment decision. Capitalized terms used on this cover page not otherwise defined shall have the meanings set forth herein.

The \$174,445,000 aggregate principal amount of Taxable Refunding Revenue Bonds (California Independent System Operator Corporation Project) Series 2021 (Green Bonds) (the "2021 Bonds") are being issued by the California Statewide Communities Development Authority (the "Authority") for the purpose of, together with other funds of the California Independent System Operator Corporation (the "Corporation"), providing funds to: (i) defease all of the California Infrastructure and Economic Development Bank Refunding Revenue Bonds (California Independent System Operator Corporation Project) Series 2013 (the "2013 Bonds"), and (ii) pay costs of issuing the 2021 Bonds. See "THE PLAN OF REFUNDING" herein. The 2021 Bonds are being issued pursuant to an Indenture of Trust (the "2021 Indenture"), dated as of January 1, 2021, between the Authority and U.S. Bank National Association, as trustee (the "Trustee").

In order to refund the 2013 Bonds, the Authority will loan the proceeds of the 2021 Bonds to the Corporation pursuant to a Loan Agreement, dated as of January 1, 2021 (the "2021 Loan Agreement"), by and between the Authority and the Corporation. Pursuant to the 2021 Loan Agreement, the Corporation will be obligated to make certain payments (the "2021 Repayment Installments") to the Trustee, as assignee of the Authority, in an amount which is sufficient to pay as and when due the principal of, premium, if any, and interest on the 2021 Bonds.

**California ISO**

The 2021 Bonds will be issuable as fully registered bonds initially in authorized denominations of \$5,000 or any integral multiple thereof. The 2021 Bonds will be initially issued in book-entry form, registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the 2021 Bonds. See APPENDIX D – "DTC AND THE BOOK-ENTRY ONLY SYSTEM" herein. Interest on the 2021 Bonds will be payable semiannually on February 1 and August 1 each year, commencing on August 1, 2021. Principal, premium, if any, and interest on the 2021 Bonds are payable by the Trustee to DTC, which is obligated in turn to remit such principal, premium, if any, and interest to its DTC participants for subsequent disbursement to the beneficial owners of the 2021 Bonds, as described herein.

The 2021 Bonds are subject to optional and mandatory redemption prior to maturity as described herein.

THE 2021 BONDS DO NOT CONSTITUTE A DEBT OR LIABILITY OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, OTHER THAN THE AUTHORITY, BUT SHALL BE PAYABLE SOLELY FROM THE FUNDS PROVIDED THEREFOR. THE AUTHORITY SHALL NOT BE OBLIGATED TO PAY THE PRINCIPAL OF THE 2021 BONDS, OR THE REDEMPTION PREMIUM OR INTEREST THEREON, EXCEPT FROM THE FUNDS PROVIDED THEREFOR UNDER THE 2021 INDENTURE AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, INCLUDING THE AUTHORITY, IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR THE REDEMPTION PREMIUM OR INTEREST ON THE 2021 BONDS. THE ISSUANCE OF THE 2021 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION OR TO MAKE ANY APPROPRIATION FOR THEIR PAYMENT. THE AUTHORITY HAS NO TAXING POWER. MOREOVER, NEITHER THE AUTHORITY NOR THE PROGRAM PARTICIPANTS SHALL BE LIABLE FOR ANY OTHER COSTS, EXPENSES, LOSSES, DAMAGES, CLAIMS OR ACTIONS, IN CONNECTION WITH THE LOAN AGREEMENT, THE 2021 BONDS OR THE INDENTURE, EXCEPT ONLY TO THE EXTENT AMOUNTS ARE RECEIVED FOR THE PAYMENT THEREOF FROM THE CORPORATION UNDER THE 2021 LOAN AGREEMENT.

The 2021 Bonds are offered when, as and if issued by the Authority and accepted by the Underwriter, subject to prior sale or withdrawal or modification of the offer without notice, and subject to receipt of an approving legal opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Corporation. Certain legal matters will be passed upon for the Authority by Richards, Watson & Gershon, A Professional Corporation, for the Corporation by its General Counsel and by its special counsel, Orrick, Herrington & Sutcliffe LLP, and for the Underwriter by its counsel, Stradling Yocca Carlson & Rauth, A Professional Corporation. The 2021 Bonds are expected to be available for delivery through the facilities of DTC in New York, New York, on or about January 26, 2021.

**Capital
Markets**

\$174,445,000
California Statewide Communities Development Authority
Taxable Refunding Revenue Bonds
(California Independent System Operator Corporation Project)
Series 2021 (Green Bonds)

MATURITY SCHEDULE

\$141,005,000 Serial Bonds

Maturity Date (February 1)	Principal Amount	Interest Rate	Yield	CUSIP[†] (13080S)
2022	\$9,050,000	0.245%	0.245%	ZH0
2023	8,735,000	0.345	0.345	ZJ6
2024	8,770,000	0.514	0.514	ZK3
2025	8,815,000	0.732	0.732	ZL1
2026	8,875,000	0.932	0.932	ZM9
2027	8,960,000	1.212	1.212	ZN7
2028	9,065,000	1.462	1.462	ZP2
2029	9,205,000	1.677	1.677	ZQ0
2030	9,355,000	1.807	1.807	ZR8
2031	9,525,000	1.877	1.877	ZS6
2032	9,705,000	2.027	2.027	ZT4
2033	9,900,000	2.177	2.177	ZU1
2034	10,115,000	2.277	2.277	ZV9
2035	10,345,000	2.377	2.377	ZW7
2036	10,585,000	2.477	2.477	ZX5

\$33,440,000 2.682% Term Bonds due February 1, 2039 Yield 2.682% CUSIP[†] 13080SZY3

[†] CUSIP® is a registered trademark of the American Bankers Association. CUSIP Global Services (“CGS”) is managed on behalf of the American Bankers Association by S&P Capital IQ. Copyright© 2020 CGS. All rights reserved. CUSIP® data herein is provided by CGS. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers are provided for convenience of reference only. None of the hereinafter-defined Authority, Underwriter, Trustee, Municipal Advisor or their agents or counsel take responsibility for the accuracy of such numbers.

No broker, dealer, salesperson or other person has been authorized by the Authority, the Corporation or the Underwriter to give any information or to make any representations other than those contained in this Official Statement in connection with the offering made hereby and, if given or made, such information or representations must not be relied upon as having been authorized by the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2021 Bonds in any jurisdiction to any person to whom it is unlawful to make such offer, solicitation or sale. This Official Statement is not to be construed as a contract with the purchasers of the 2021 Bonds. Statements in this Official Statement which involve estimates, forecasts or matters of opinion whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of fact.

The information contained in this Official Statement has been obtained from the Corporation and other sources which are believed to be reliable. The information and expressions of opinion contained in this Official Statement are subject to change without notice and neither the delivery of this Official Statement nor any sale made by means hereof shall, under any circumstances, create any implication that there have not been changes in the affairs of the Authority or the Corporation since the date of this Official Statement.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board ("MSRB") through the Electronic Municipal Market Access website of the MSRB, currently located at www.emma.msrb.org. The information contained on such website is not part of this Official Statement and is not incorporated herein.

The Underwriter has provided the following sentence for inclusion in this Official Statement. The Underwriter has reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information.

THE 2021 BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, NOR HAS THE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS.

In connection with the offering of the 2021 Bonds, the Underwriter may over-allot or effect transactions which stabilize or maintain the market price of the 2021 Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time. The Underwriter may offer and sell the 2021 Bonds to certain dealers, institutional investors and others at prices lower than the public offering price stated on the cover page hereof and such public offering price may be changed from time to time by the Underwriter.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Neither the Authority nor the Corporation plans to issue any updates or revisions to those forward-looking statements if or when expectations or events, conditions or circumstances on which such statements are based occur.

The Corporation and the Authority maintain websites. However, the information presented on the Corporation's website, the Authority's website and any website referred to in this Official Statement is not part of this Official Statement nor has such information been incorporated by reference herein, and should not be relied upon in making an investment decision with respect to the 2021 Bonds.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Officers

Elliot Mainzer, *President and Chief Executive Officer*
Khaled Abdul-Rahman, *Vice President, Power System and Market Technology*
Roger Collanton, *Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary*
Stacey Crowley, *Vice President, External and Customer Affairs*
Neil Millar, *Vice President, Transmission Planning and Infrastructure Development*
Mark Rothleder, *Senior Vice President and Chief Operating Officer*
Ryan Seghesio, *Vice President, Chief Financial Officer and Treasurer*
Jodi Ziemathis, *Vice President, Human Resources*

SPECIAL SERVICES

Issuer

California Statewide Communities Development Authority

Bond Counsel and Special Counsel to the California Independent System Operator Corporation

Orrick, Herrington & Sutcliffe LLP

Municipal Advisor

Sperry Capital Inc.

Trustee

U.S. Bank National Association

Verification Agent

Robert Thomas CPA, LLC

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OFFICIAL STATEMENT
relating to
\$174,445,000
California Statewide Communities Development Authority
Taxable Refunding Revenue Bonds
(California Independent System Operator Corporation Project)
Series 2021 (Green Bonds)

INTRODUCTION

This Introduction is qualified in its entirety by reference to the more detailed information included and referred to elsewhere in this Official Statement. The offering of the 2021 Bonds to potential investors is made only by means of the entire Official Statement. Terms used in this Introduction and not otherwise defined shall have the respective meanings assigned to them elsewhere in this Official Statement. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS” herein.

Purpose

This Official Statement, which includes the cover page and Appendices hereto, of the California Statewide Communities Development Authority (the “Authority”) is being furnished to provide certain information concerning the Authority’s Taxable Refunding Revenue Bonds (California Independent System Operator Corporation Project) Series 2021 (Green Bonds) in the principal amount of \$174,445,000 (the “2021 Bonds”).

The 2021 Bonds are being issued by the Authority under and pursuant to an Indenture of Trust, dated as of January 1, 2021 (the “2021 Indenture”), by and between the Authority and U.S. Bank National Association, as trustee (the “Trustee”), for the purpose of, together with other funds of the California Independent System Operator Corporation (the “Corporation”), providing funds to: (i) defease all of the California Infrastructure and Economic Development Bank Refunding Revenue Bonds (California Independent System Operator Corporation Project) Series 2013 (the “2013 Bonds”); and (ii) pay costs of issuance of the 2021 Bonds. See “THE PLAN OF REFUNDING” herein.

The Corporation

The Corporation is responsible for the reliable operation of long-distance, high-voltage power lines throughout much of California and part of Nevada. To perform this function efficiently, the Corporation administers markets for energy and related services that extend across most of the Western United States, and also serves as Reliability Coordinator for the majority of utilities west of the Rocky Mountains.

The Corporation is a nonprofit public benefit corporation that was incorporated in May 1997 and, beginning March 31, 1998, assumed operational control of the transmission facilities (also called the transmission lines or transmission systems) of the three largest investor-owned electric utilities in California. Since then, sixteen additional utilities have turned over operational control of their transmission systems to the Corporation, including seven municipal utilities, eight private transmission-owning corporations, and one cooperatively owned transmission utility, with a seventeenth entity a federal power marketing agency, turning over control of some transmission rights. The Corporation now manages the flow of electricity across approximately 26,000 miles of power lines (the “ISO Grid”). The ISO Grid serves approximately 80% of California’s total electrical load and approximately 30 million residents. The Corporation also has reliability responsibilities for a broader area known as the ISO balancing authority

area (the “ISO Balancing Area”), which involves overseeing the delivery of electricity between the ISO Balancing Area and neighboring balancing authority areas, neighboring states, Canada and Mexico.

The Corporation has received a determination letter from the Internal Revenue Service that it has qualified as a nonprofit corporation described in Section 501(c)(3) of the Internal Revenue Code of 1986. There is no assurance that the Corporation will continue to maintain its status as a nonprofit corporation described in Section 501(c)(3) of the Code. See “THE CORPORATION” and APPENDIX A – “CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION” herein.

Security and Sources of Payment for the 2021 Bonds

In connection with the loan of the proceeds of the 2021 Bonds to the Corporation, the Authority and the Corporation will enter into a Loan Agreement, dated as of January 1, 2021 (the “2021 Loan Agreement”). Pursuant to the 2021 Loan Agreement, the Corporation will be obligated to make certain payments (the “2021 Repayment Installments”) to the Trustee, as assignee of the Authority, in an amount which is sufficient to pay as and when due the principal of, premium, if any, and interest on the 2021 Bonds. See “SECURITY FOR THE 2021 BONDS.” See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS.” See APPENDIX A – “CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION – Risk Factors – *ISO Charges and GMC.*”

THE 2021 BONDS DO NOT CONSTITUTE A DEBT OR LIABILITY OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, OTHER THAN THE AUTHORITY, BUT SHALL BE PAYABLE SOLELY FROM THE FUNDS PROVIDED THEREFOR. THE AUTHORITY SHALL NOT BE OBLIGATED TO PAY THE PRINCIPAL OF THE 2021 BONDS, OR THE REDEMPTION PREMIUM OR INTEREST THEREON, EXCEPT FROM THE FUNDS PROVIDED THEREFOR UNDER THE 2021 INDENTURE AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, INCLUDING THE AUTHORITY, IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR THE REDEMPTION PREMIUM OR INTEREST ON THE 2021 BONDS. THE ISSUANCE OF THE 2021 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION OR TO MAKE ANY APPROPRIATION FOR THEIR PAYMENT. THE AUTHORITY HAS NO TAXING POWER. MOREOVER, NEITHER THE AUTHORITY NOR THE PROGRAM PARTICIPANTS SHALL BE LIABLE FOR ANY OTHER COSTS, EXPENSES, LOSSES, DAMAGES, CLAIMS OR ACTIONS, IN CONNECTION WITH THE LOAN AGREEMENT, THE 2021 BONDS OR THE INDENTURE, EXCEPT ONLY TO THE EXTENT AMOUNTS ARE RECEIVED FOR THE PAYMENT THEREOF FROM THE CORPORATION UNDER THE 2021 LOAN AGREEMENT.

Other Matters

Brief descriptions of the Authority, as well as certain provisions of the 2021 Bonds, the 2021 Loan Agreement, the 2021 Indenture and certain other documents relating to the 2021 Bonds, are included in this Official Statement. Such information and descriptions do not purport to be comprehensive or definitive. All references herein to the specified documents are qualified in their entirety by reference to each such document, copies of which are available from the Corporation and the Underwriter during the period of the offering. All references to the 2021 Bonds are qualified in their entirety by reference to the definitive form thereof and the information with respect thereto included in the aforesaid documents. Unless otherwise indicated, capitalized terms not defined herein have the meanings specified in APPENDIX C –

“SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS—Definitions” or if not defined therein, in the Indenture.

ESTIMATED SOURCES AND USES OF FUNDS

The proceeds of the 2021 Bonds, together with other funds of the Corporation, are expected to be applied in the estimated amounts as follows:

Estimated Sources:	<u>Total</u>
Principal Amount of 2021 Bonds.....	\$174,445,000.00
Funds Released from the Reserved Account for the 2013 Bonds and Contribution of the Corporation	9,458,887.50
Total Sources	\$183,903,887.50
Estimated Uses:	
Refunding of 2013 Bonds.....	\$182,504,788.09
Costs of Issuance ⁽¹⁾	1,399,099.41
Total Uses	\$183,903,887.50

⁽¹⁾ Includes legal, financing, consulting fees, rating agency fees, underwriter’s discount, trustee fees, printing costs and other miscellaneous expenses.

PLAN OF REFUNDING

The 2013 Bonds were previously issued in the aggregate principal amount of \$191,820,000, of which \$163,380,000 principal amount remains outstanding. Proceeds of the 2013 Bonds were applied to (i) refund the California Infrastructure and Economic Development Bank Refunding Revenue Bonds (California Independent System Operator Corporation Project) 2009 Series A, the proceeds of which were used to finance the design and construction of a headquarters facility for the Corporation; and (ii) finance other planned capital projects, including, but not limited to, the acquisition and development of computer hardware and software systems and the acquisition of office equipment.

Upon issuance and delivery of the 2021 Bonds, the Corporation will enter into an Escrow Agreement (the “Escrow Agreement”) with U.S. Bank National Association (the “Escrow Agent”), pursuant to which the Escrow Agent will acquire and hold in a separate irrevocable trust account (the “Escrow Fund”) created by the Escrow Agreement proceeds of the 2021 Bonds as well as other moneys. Such proceeds and other moneys will be invested in government obligations which will provide funds sufficient to pay the principal of and interest on all of the outstanding 2013 Bonds both on and prior to the redemption date of February 1, 2023.

VERIFICATION

In connection with the issuance of the 2021 Bonds and the refunding of the 2013 Bonds, Robert Thomas CPA, LLC, independent certified public accountants, will verify the mathematical accuracy of certain computations demonstrating the sufficiency of the Escrow Fund, including the moneys deposited therein and the anticipated receipts from the Escrow Fund investments, to pay the principal or redemption price of and interest on all 2013 Bonds, when due. Such verification will be based in part on schedules and information provided by the Underwriter with respect to the foregoing computations.

DESIGNATION AS GREEN BONDS

The Corporation has self-designated the 2021 Bonds as “Green Bonds” to allow investors to invest directly in bonds that finance or refinance environmentally beneficial projects. The proceeds of the 2021 Bonds will be used to refund the 2013 Bonds. A portion of the proceeds of the 2013 Bonds was applied to refund the California Infrastructure and Economic Development Bank Refunding Revenue Bonds (California Independent System Operator Corporation Project) 2009 Series A, the proceeds of which were used to finance the design and construction of the Corporation’s headquarters facility in Folsom, California (the “Headquarters Facility”). The Headquarters Facility was certified Platinum status by the U.S. Green Building Council under the Leadership in Energy and Environmental Design (LEED) rating program. All of the proceeds of the 2021 Bonds will be applied on the date of issuance of the 2021 Bonds to refund the 2013 Bonds and to pay costs of issuing the 2021 Bonds. See APPENDIX A – “CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION – ISO Facilities” for additional information concerning the LEED certification.

As described above, the Corporation has self-designated the 2021 Bonds as “Green Bonds.” Neither the Corporation nor the Authority make any representation as to the ability of the Headquarters Facility refinanced with the proceeds of the 2021 Bonds to maintain any particular environmental and sustainability criteria. Neither the Corporation nor the Authority have undertaken to provide any reports related to the environmental and sustainability aspects of the Headquarters Facility. The 2021 Bonds may not be a suitable investment for all investors seeking to invest in green or sustainable assets. There is currently no market consensus on what precise attributes are required for a particular project to be defined as “green” or “sustainable” and therefore no assurance can be provided to investors that the Headquarters Facility will continue to meet investor expectations regarding sustainability performance. The term “Green Bond” is not defined in the 2021 Indenture or the 2021 Loan Agreement, or other documents executed by the Corporation and the Authority in connection with the issuance of the 2021 Bonds. The term “Green Bond” is solely for identification purposes and is not intended to provide or imply that the owners of the Bonds are entitled to any security other than that described under the heading “SECURITY FOR THE 2021 BONDS.”

THE AUTHORITY

The Authority is a joint powers agency organized pursuant to a Joint Powers Agreement among a number of California counties, cities and special districts entered into pursuant to the provisions relating to the joint exercise of powers contained in Chapter 5 of Division 7 of Title 1 (commencing with Section 6500) of the California Government Code. The Authority is authorized to participate in financings for the benefit of certain organizations described under Section 501(c)(3) of the Internal Revenue Code of 1986.

The Authority has entered into, sold and delivered obligations, and will in the future enter into, sell and deliver obligations, other than the 2021 Bonds, which other obligations are and will be secured by instruments separate and apart from the 2021 Indenture and the 2021 Loan Agreement. The holders of such obligations of the Authority have no claim on the security for the 2021 Bonds and the holders of the 2021 Bonds will have no claim on the security of such other obligations issued by the Authority.

THE CORPORATION

The Corporation is responsible for the reliable operation of long-distance, high-voltage power lines throughout much of California and part of Nevada. To perform this function efficiently, the Corporation

administers markets for energy and related services that extend across most of the Western United States, and also serves as Reliability Coordinator for the majority of utilities west of the Rocky Mountains.

The Corporation is a nonprofit public benefit corporation that was incorporated in May 1997 and, beginning March 31, 1998, assumed operational control of the transmission facilities (also called the transmission lines or transmission systems) of the three largest investor-owned electric utilities in California. Since then, sixteen additional utilities have turned over operational control of their transmission systems to the Corporation, including seven municipal utilities, eight private transmission-owning corporations, and one cooperatively owned transmission utility, with a seventeenth entity a federal power marketing agency, turning over control of some transmission rights. The Corporation now manages the flow of electricity across approximately 26,000 miles of power lines encompassing the ISO Grid. The ISO Grid serves approximately 80% of California's total electrical load and approximately 30 million residents. The Corporation also has reliability responsibilities for a broader area known as the ISO Balancing Area, which involves overseeing the delivery of electricity between the ISO Balancing Area and neighboring balancing authority areas, neighboring states, Canada and Mexico.

Under its tariff (the "Tariff") on file with and approved by the Federal Energy Regulatory Commission ("FERC"), the Corporation provides transmission scheduling services and administers wholesale markets to procure electric energy and capacity necessary to ensure the reliable operation of the transmission systems that it operates. Through these markets, the Corporation forecasts the electricity load within the ISO Balancing Area and dispatches the lowest cost power units to meet demand every five minutes. More than 200 companies and other entities participate in the markets, including companies and entities that control hundreds of power plants and other supply resources. The Corporation oversees the dispatch of these resources.

The Corporation also settles transactions for the wholesale markets that it operates, receiving payments from net debtors, which include buyers of energy, and paying the net creditors, which include sellers of energy. The Corporation's ability to meet its obligations to pay debt service under the 2021 Loan Agreement is dependent on the collection of charges under its Tariff. The ability to collect such charges may be influenced by various factors, many of which are outside the Corporation's control. See APPENDIX A – "CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION – Risk Factors."

Beginning in 2014, the Corporation has operated the Western Energy Imbalance Market (the "EIM"), which extends its real-time energy market to other balancing authority areas in the western interconnection that are not part of the grid the Corporation operates. The EIM provides economic and reliability benefits to participants. The broader footprint provides more opportunities to integrate cleaner sources of energy, such as wind and solar, that may be produced in one area while needed in another. Ten other balancing authorities are currently participating and eleven more have committed to participate in the future.

The Corporation has received a determination letter from the Internal Revenue Service that it has qualified as a nonprofit corporation described in Section 501(c)(3) of the Internal Revenue Code of 1986. There is no assurance that the Corporation will continue to maintain its status as a nonprofit corporation described in Section 501(c)(3) of the Code. For additional information concerning the Corporation, see APPENDIX A – "CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION" herein.

THE 2021 BONDS

The following is a summary of certain provisions of the 2021 Bonds. Reference is made to the 2021 Bonds for the complete text thereof and to the 2021 Indenture for a more detailed description of such provisions. The discussion herein is qualified by such reference. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS” herein.

General

The 2021 Bonds will be issued in the aggregate principal amount set forth on the cover of this Official Statement. The 2021 Bonds will be dated their date of delivery and will bear interest at the rates and mature on the dates and in the amounts set forth on the cover page of this Official Statement. Ownership interests in the 2021 Bonds will be in denominations of \$5,000 or any integral multiple thereof. Interest on the 2021 Bonds is payable on August 1, 2021, and semiannually thereafter on February 1 and August 1 of each year.

The 2021 Bonds will be registered in the name of Cede & Co., the nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the 2021 Bonds. So long as the 2021 Bonds are held in the book-entry system, DTC or its nominee will be the registered owner of the 2021 Bonds for all purposes of the 2021 Indenture, the 2021 Bonds and this Official Statement. For purposes of this Official Statement, DTC or its nominee, and its successors and assigns, are referred to as the “Securities Depository.” So long as the 2021 Bonds are held in book-entry form through DTC, all payments with respect to principal of, premium, if any, interest on, and Purchase Price of, the 2021 Bonds will be made pursuant to DTC’s rules and procedures. See APPENDIX D – “DTC AND THE BOOK-ENTRY ONLY SYSTEM” herein.

Redemption of the 2021 Bonds

Optional Redemption. The 2021 Bonds maturing on or after February 1, 2032, are subject to redemption prior to their respective stated maturities, as a whole or in part on any date on or after February 1, 2031, at the principal amount of the 2021 Bonds to be redeemed, without premium, plus unpaid accrued interest, if any, to the date of redemption, from any moneys received by the Trustee from the Corporation pursuant to the 2021 Loan Agreement and deposited in the Bond Fund, provided in each case that the maturities and the principal amount of 2021 Bonds of each maturity to be redeemed from the amount so prepaid and the redemption date shall be as specified in the Written Request of the Corporation given pursuant to the 2021 Loan Agreement.

Mandatory Redemption from Sinking Fund Installments. The 2021 Bonds maturing on February 1, 2039 are subject to redemption, in part, pro rata, from Sinking Fund Installments deposited in the Bond Fund on each February 1, from and after February 1, 2037 at the principal amount of the 2021 Bonds to be redeemed, without premium. Sinking Fund Installments for the 2021 Bonds maturing on February 1, 2039 shall be due on the following dates and in the following amounts:

<i>Sinking Fund Installment</i>	<i>Sinking Fund Installment</i>
<i>Due Date February 1</i>	
2037	\$10,855,000
2038	11,145,000
2039*	11,440,000

* Maturity.

In the event that 2021 Bonds maturing on February 1, 2039 have been redeemed pursuant to the provisions of the Indenture described under “Optional Redemption” above, the remaining Sinking Fund Installments shall be reduced, in an aggregate amount equal to the principal amount of such 2021 Bonds so redeemed, as directed in writing by an Authorized Corporation Representative, and in the absence of such direction, as proportionately as possible in integral multiples of the applicable Authorized Denominations.

Notice of Redemption. The Trustee will give notice of any redemption of 2021 Bonds, by first-class mail or by e-mail, postage prepaid, to the Owners of all 2021 Bonds to be redeemed, at the addresses appearing on the 2021 Bond Register, and other entities specified in the 2021 Indenture, not less than 20 days nor more than 60 days prior to the redemption date. Each notice of redemption of 2021 Bonds will identify the 2021 Bonds to be redeemed and will state the date of such notice, the date of issue of the 2021 Bonds to be redeemed, the redemption date, the redemption price, the place of redemption, the principal amount, the CUSIP numbers (if any), and, if less than all of the 2021 Bonds are to be redeemed, the distinctive certificate numbers of the 2021 Bonds to be redeemed and, in the case of 2021 Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed. So long as DTC or its nominee is the sole registered owner of the 2021 Bonds under the book-entry system, redemption notices are to be sent to Cede & Co. Notices of redemption are also to be sent to certain information services that disseminate redemption notices and to the Municipal Securities Rulemaking Board.

With respect to any notice of optional redemption of 2021 Bonds pursuant to the provisions of the Indenture described under “Optional Redemption” above, unless upon the giving of such notice such 2021 Bonds shall be deemed to have been paid within the meaning of the Indenture, such notice shall state that such redemption shall be conditioned upon the receipt by the Trustee on or prior to the date fixed for such redemption of amounts sufficient to pay the redemption price of the 2021 Bonds to be redeemed, and that if such amounts shall not have been so received said notice shall be of no force and effect and the Authority shall not be required to redeem such 2021 Bonds. In the event that such notice of redemption contains such a condition and such amounts are not so received, the redemption shall not be made and the Trustee shall within a reasonable time thereafter give notice, to the Persons and in the manner in which the notice of redemption was given, that such amounts were not so received.

If upon the expiration of 60 days succeeding any redemption date, any 2021 Bonds called for redemption shall not have been presented to the Trustee for payment, the Trustee shall no later than 90 days following such redemption date send Notice by Mail to the Owner of each 2021 Bond not so presented. Failure to mail the notices required by this paragraph to any Owner, or any defect in any notice so mailed, shall not affect the validity of the proceedings for redemption of any 2021 Bonds nor impose any liability on the Trustee.

Effect of Redemption; Partial Redemption. Notice of redemption having been duly given and amounts for payment of the redemption price being held by the Trustee, the 2021 Bonds so called for redemption will, on the redemption date designated in such notice, become due and payable at the redemption price specified in such notice, interest on the 2021 Bonds to be redeemed will cease to accrue, said 2021 Bonds will cease to be entitled to any lien, benefit or security under the 2021 Indenture, and the Owners thereof will have no rights except to receive payment, but only from the funds provided in connection with such redemption, of the redemption price of and interest, if any, accrued on such 2021 Bonds to the redemption date.

Upon surrender of any 2021 Bond redeemed in part only, the Trustee will exchange the 2021 Bond redeemed for a new 2021 Bond of like tenor and in an Authorized Denomination without charge to the Owner in the principal amount of the portion of the 2021 Bond not redeemed. In the event of any partial redemption of a 2021 Bond which is registered in the name of the Nominee, DTC may elect to make a notation on the 2021 Bond certificate which reflects the date and amount of the reduction in principal

amount of said 2021 Bond in lieu of surrendering the 2021 Bond certificate to the Trustee for exchange. The Authority, the Corporation and the Trustee will be fully released and discharged from all liability upon, and to the extent of, payment of the redemption price for any partial redemption and upon the taking of all other actions required under the 2021 Indenture in connection with such redemption.

Selection of 2021 Bonds to be Redeemed. Whenever provision is made for the redemption of a portion of the 2021 Bonds of a maturity date prior to maturity, then

(a) If the 2021 Bonds are registered in book-entry only form and so long as DTC or a successor securities depository is the sole registered owner of the 2021 Bonds, the particular 2021 Bonds will be redeemed on a “Pro-Rata Pass-Through Distribution of Principal” basis in accordance with DTC procedures, provided further, that such redemption is made in accordance with the operational arrangements of DTC then in effect. The Trustee will send notice to DTC in accordance with such rules and procedures to effect a pro rata reduction of principal of all outstanding 2021 Bonds to accomplish the optional and mandatory sinking fund redemptions described above through a pass-through distribution of principal. In connection with each such redemption, the Trustee will include in the written notice of redemption described above the dollar amount per \$1,000 principal amount payable on account of principal and accrued interest to effect a pro rata reduction through a pass-through distribution of principal on the related redemption date. DTC will be responsible for distributing the principal and accrued interest among its direct participants, as applicable, pro rata in accordance with its rules and procedures for a pro rata pass-through distribution of principal based upon the beneficial interest in the 2021 Bonds being redeemed that DTC records list as owned by each DTC direct participant as of the record date for such payment. Any failure of the Trustee to make such selection or of DTC or its participants or any other intermediary, to make such selection or proportional allocation, for whatever reason, will not affect the sufficiency or the validity of the redemption of the 2021 Bonds.

(b) If DTC’s operational arrangements do not allow for allocation of such redemption on a pro rata pass-through distribution of principal basis, the portion of the 2021 Bonds to be redeemed on such dates will be selected in accordance with DTC’s then existing rules and procedures and may be by lot.

(c) If the 2021 Bonds are not then in book-entry form at the time of such redemption, on each redemption date, the Trustee may select the 2021 Bonds for redemption pro rata. The Trustee will select such portions of 2021 Bonds to be redeemed in such manner as the Trustee in its discretion may deem to be fair and appropriate.

SECURITY FOR THE 2021 BONDS

Payments by the Corporation under the 2021 Loan Agreement

Payment of the principal of, and premium, if any, and interest on the 2021 Bonds will be secured by an assignment by the Authority to the Trustee of all of the 2021 Revenues, all amounts and securities held by the Trustee under the 2021 Indenture, and any and all of the Authority’s rights and privileges under the 2021 Loan Agreement, including all 2021 Repayment Installments to be made by the Corporation to the Authority under the 2021 Loan Agreement (except the Authority’s rights with respect to notices, consents and approvals, and its rights to receive certain payments with respect to fees, expenses and indemnification rights). “2021 Revenues” is defined under the 2021 Indenture to mean (i) all receipts, installment payments and other income or payments derived by the Authority or the Trustee under the 2021 Loan Agreement, (ii) any income or revenue derived from the investment of any money in any fund or account established pursuant to the Indenture, including all Repayment Installments and (iii) any other payments made by the Corporation as contemplated by the 2021 Loan Agreement; provided, however, that

such term shall not include the amounts payable (including fees and expenses) to the Authority, the Trustee or other persons, as well as other expenses pursuant to the Loan Agreement (“Additional Payments”). The Corporation’s obligations under the 2021 Loan Agreement are unsecured obligations, and no assets of the Corporation are pledged to secure the Corporation’s obligations with respect to the payment of principal, interest or premium with respect to the 2021 Bonds. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS.”

Financial and operational information of the Corporation, including a discussion of factors that could affect the 2021 Bonds and the future financial condition of the Corporation, is included in APPENDIX A – “CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION.” Each prospective investor of the 2021 Bonds should make an independent evaluation of all of the information presented in this Official Statement in order to make an informed investment decision.

THE 2021 BONDS DO NOT CONSTITUTE A DEBT OR LIABILITY OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, OTHER THAN THE AUTHORITY, BUT SHALL BE PAYABLE SOLELY FROM THE FUNDS PROVIDED THEREFOR. THE AUTHORITY SHALL NOT BE OBLIGATED TO PAY THE PRINCIPAL OF THE 2021 BONDS, OR THE REDEMPTION PREMIUM OR INTEREST THEREON, EXCEPT FROM THE FUNDS PROVIDED THEREFOR UNDER THE 2021 INDENTURE AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF CALIFORNIA OR OF ANY POLITICAL SUBDIVISION THEREOF, INCLUDING THE AUTHORITY, IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR THE REDEMPTION PREMIUM OR INTEREST ON THE 2021 BONDS. THE ISSUANCE OF THE 2021 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION OR TO MAKE ANY APPROPRIATION FOR THEIR PAYMENT. THE AUTHORITY HAS NO TAXING POWER. MOREOVER, NEITHER THE AUTHORITY NOR THE PROGRAM PARTICIPANTS SHALL BE LIABLE FOR ANY OTHER COSTS, EXPENSES, LOSSES, DAMAGES, CLAIMS OR ACTIONS, IN CONNECTION WITH THE LOAN AGREEMENT, THE 2021 BONDS OR THE INDENTURE, EXCEPT ONLY TO THE EXTENT AMOUNTS ARE RECEIVED FOR THE PAYMENT THEREOF FROM THE CORPORATION UNDER THE 2021 LOAN AGREEMENT.

Tariff Covenant

The Corporation has covenanted in the 2021 Loan Agreement that, so long as any 2021 Bonds remain Outstanding, it will not file with FERC under Section 205 of the Federal Power Act any amendment to the Tariff that has the effect of: (a) eliminating the rule, currently in Appendix F, part C of the Tariff, that the Corporation’s Grid Management Charge revenue requirement includes a “debt service coverage requirement” of not less than 25%, (b) eliminating the requirement that the Corporation maintain a “CAISO Operating Cost Reserve” of 15% of its annual Operating Costs, as currently in Appendix A (the definition of CAISO Operating Cost Reserve”) and Appendix F (including the “CAISO Operating Cost Reserve” adjustment in the Grid Management Charge revenue requirement) of the Tariff, or (c) eliminating the rule, currently in Sections 11.29.13.7 and 11.29.17.1 of the Tariff, that the Corporation has a priority claim to recover Grid Management Charge from any market revenue received, before payments are made to market participants. See APPENDIX A – “CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION – Grid Management Charge” for additional information concerning the Grid Management Charge.

“Grid Management Charge” means the Corporation’s several separate charges for services offered by the Corporation that are intended to recover the Corporation’s start-up and development costs and the

costs associated with the ongoing operation and maintenance (including financing costs) of the Corporation's controlled grid. The Debt Service Coverage Requirement calculation may be satisfied through the use of any funds of the Corporation legally available for the payment of debt service on the 2021 Bonds. See APPENDIX A – "CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION – Grid Management Charge" for additional information concerning the Grid Management Charge.

Amendment of 2021 Indenture and 2021 Loan Agreement

The 2021 Indenture and the 2021 Loan Agreement may be amended with consent of the Trustee and without consent of any Owners to the extent set forth in the 2021 Indenture. See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE PRINCIPAL LEGAL DOCUMENTS."

General Limitations on Remedies

The rights of the Owners of the 2021 Bonds are subject to the limitations on legal remedies against public agencies in the State. Additionally, enforceability of the rights and remedies of the Owners of the 2021 Bonds, and the obligations incurred by the Authority and the Corporation, may become subject to the following: the Federal Bankruptcy Code and applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws relating to or affecting the enforcement of creditor's rights generally, now or hereafter in effect; equity principles which may limit the specific enforcement under State law of certain remedies; the exercise by the United States of America of the powers delegated to it by the Constitution; and the reasonable and necessary exercise, in certain exceptional situations, of the police powers inherent in the sovereignty of the State and its governmental bodies in the interest of servicing a significant and legitimate public purpose. Bankruptcy proceedings, or the exercise of powers by the federal or State government, if initiated, could subject the Owners of the 2021 Bonds to judicial discretion and interpretation of their rights in bankruptcy or otherwise, and consequently may entail risks of delay, limitation, or modification of their rights.

DEBT SERVICE SCHEDULE

The following table sets forth the schedules of debt service for the 2021 Bonds. The Corporation has no other bonds outstanding.

2021 Bonds⁽¹⁾			
Bond Year (February 1)	Principal	Interest	Total
2022	\$9,050,000	\$3,077,622.31	\$12,127,622.31
2023	8,735,000	3,013,290.60	11,748,290.60
2024	8,770,000	2,983,154.86	11,753,154.86
2025	8,815,000	2,938,077.06	11,753,077.06
2026	8,875,000	2,873,551.26	11,748,551.26
2027	8,960,000	2,790,836.26	11,750,836.26
2028	9,065,000	2,682,241.06	11,747,241.06
2029	9,205,000	2,549,710.76	11,754,710.76
2030	9,355,000	2,395,342.90	11,750,342.90
2031	9,525,000	2,226,298.06	11,751,298.06
2032	9,705,000	2,047,513.80	11,752,513.80
2033	9,900,000	1,850,793.46	11,750,793.46
2034	10,115,000	1,635,270.46	11,750,270.46
2035	10,345,000	1,404,951.90	11,749,951.90
2036	10,585,000	1,159,051.26	11,744,051.26
2037	10,855,000	896,860.80	11,751,860.80
2038	11,145,000	605,729.70	11,750,729.70
2039	11,440,000	306,820.80	11,746,820.80
Total	\$174,445,000	\$37,437,117.31	\$211,882,117.31

⁽¹⁾ The 2013 Bonds will no longer be outstanding as of delivery of the 2021 Bonds.

ABSENCE OF LITIGATION

The Authority

To the knowledge of the Authority, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, governmental agency, public board or body, pending against the Authority seeking to restrain or enjoin the sale or issuance of the 2021 Bonds, or in any way contesting or affecting any proceedings of the Authority taken concerning the sale thereof, the pledge or application of any moneys or security provided for the payment of the 2021 Bonds, the validity or enforceability of the documents executed by the Authority in connection with the 2021 Bonds, the completeness or accuracy of this Official Statement or the existence or powers of the Authority relating to the sale of the 2021 Bonds.

The Corporation

There is no action, suit, proceeding, inquiry or investigation at law or in equity or before or by any court, public board or body known to the Corporation to be pending or threatened against the Corporation wherein an unfavorable decision, ruling or finding would adversely affect (i) the corporate existence or organization of the Corporation or the title to office of any member of the Corporation's Board of Governors or officer of the Corporation or any power of the Corporation material to the issuance, sale and delivery of

the 2021 Bonds, or (ii) the validity of the proceedings taken by the Corporation for the adoption, authorization, execution, delivery and performance by the Corporation of, or the validity or enforceability of, the 2021 Bonds, or the 2021 Loan Agreement. The Corporation is involved in litigation in relation to its normal business activities as described in APPENDIX A to this Official Statement.

MUNICIPAL ADVISOR

The Corporation has retained Sperry Capital Inc., Sausalito, California, as Municipal Advisor to the Corporation in connection with the issuance of the 2021 Bonds. The Municipal Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume any responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

INDEPENDENT ACCOUNTANTS

The financial statements of the Corporation as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019, included in APPENDIX B to this Official Statement, have been audited by PricewaterhouseCoopers LLP, independent accountants, as stated in their report appearing therein.

RATINGS

Moody's Investors Service ("Moody's"), S&P Global Ratings ("S&P") and Fitch Ratings ("Fitch") have assigned the 2021 Bonds the ratings of "A1," "A+," and "A+," respectively. Such ratings express only the views of the rating agencies and an explanation of the significance of such ratings and any ratings on any of the Corporation's outstanding obligations may be obtained only from such rating agencies as follows: Moody's Investors Service, 7 World Trade Center, 250 Greenwich Street, New York, New York 10007; Standard & Poor's Ratings Services, 55 Water Street, 39th Floor, New York, New York 10041; and Fitch Ratings Services, One State Street Plaza, New York, New York 10004. There is no assurance that the ratings assigned to the 2021 Bonds on the date of delivery will continue for any given period of time or that they will not be revised, either downward or upward, or withdrawn entirely by the rating agencies, or any of them, if in their, or its, judgment, circumstances so warrant. Neither the Authority nor the Corporation undertakes any responsibility to oppose any such revision or withdrawal or to inform any Owner of any such revision or withdrawal. Any such downward revision, suspension or withdrawal of a rating may have an adverse effect on the market price of the 2021 Bonds.

UNDERWRITING

The Underwriter named on the cover page hereof (the "Underwriter") is expected to agree, subject to certain conditions, to purchase the 2021 Bonds from the Authority at a price of \$174,008,887.51 (being the principal amount of the 2021 Bonds, less Underwriter's discount of \$436,112.49). The Bond Purchase Agreement provides that the Underwriter is obligated to purchase all of the 2021 Bonds if any are purchased. The 2021 Bonds may be offered and sold by the Underwriter to certain dealers and others at prices lower than the public offering price indicated on the cover of this Official Statement, and the public offering price may be changed, from time to time, by the Underwriter. The Corporation has agreed to indemnify the Authority and the Underwriter against certain liabilities, including certain liabilities under federal securities laws.

The Underwriter and its respective affiliates are full-service financial institutions engaged in various activities that may include securities trading, commercial and investment banking, municipal advisory, brokerage, and asset management. In the ordinary course of business, the Underwriter and its respective affiliates may actively trade debt and, if applicable, equity securities (or related derivative securities) and provide financial instruments (which may include bank loans, credit support or interest rate swaps). The Underwriter and its respective affiliates may engage in transactions for their own accounts involving the securities and instruments made the subject of this securities offering or other offering of the Authority and/or the Corporation. The Underwriter and its respective affiliates may make a market in credit default swaps with respect to municipal securities in the future. The Underwriter and its respective affiliates may also communicate independent investment recommendations, market color or trading ideas and publish independent research views in respect of this securities offering or other offerings of the Authority and/or the Corporation.

CONTINUING DISCLOSURE

The Corporation will covenant for the benefit of the Owners of the 2021 Bonds to provide certain financial information and operating data relating to the Corporation (the “Annual Report”) as provided in the Continuing Disclosure Agreement. The Annual Report will be filed by the Corporation with the Municipal Securities Rulemaking Board (the “MSRB”). The notices of certain enumerated events will be filed by the Corporation with the MSRB. The specific nature of the information to be contained in the Annual Report or the notices of material events by the Corporation is set forth in APPENDIX F – “PROPOSED FORM OF CONTINUING DISCLOSURE AGREEMENT.” The Authority has not undertaken any responsibility regarding and has no duty to enforce the Corporation’s continuing disclosure obligations with respect to the 2021 Bonds.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Corporation (“Bond Counsel”), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2021 Bonds is not excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”). Bond Counsel is of the opinion that interest on the 2021 Bonds is exempt from State of California personal income taxes. Bond Counsel expresses no opinion regarding any other tax consequences relating to the ownership or disposition of, or the amount, accrual, or receipt of interest on, the 2021 Bonds. The proposed form of opinion of Bond Counsel is contained in Appendix E hereto.

The following discussion summarizes certain U.S. federal income tax considerations generally applicable to holders of the 2021 Bonds that acquire their 2021 Bonds in the initial offering. The discussion below is based upon laws, regulations, rulings, and decisions in effect and available on the date hereof, all of which are subject to change, possibly with retroactive effect. Prospective investors should note that no rulings have been or are expected to be sought from the U.S. Internal Revenue Service (the “IRS”) with respect to any of the U.S. federal tax consequences discussed below, and no assurance can be given that the IRS will not take contrary positions. Further, the following discussion does not deal with U.S. tax consequences applicable to any given investor, nor does it address the U.S. tax considerations applicable to all categories of investors, some of which may be subject to special taxing rules (regardless of whether or not such investors constitute U.S. Holders), such as certain U.S. expatriates, banks, REITs, RICs, insurance companies, tax-exempt organizations, dealers or traders in securities or currencies, partnerships, S corporations, estates and trusts, investors that hold their 2021 Bonds as part of a hedge, straddle or an

integrated or conversion transaction, investors whose “functional currency” is not the U.S. dollar, or certain taxpayers that are required to prepare certified financial statements or file financial statements with certain regulatory or governmental agencies. Furthermore, it does not address (i) alternative minimum tax consequences, (ii) the net investment income tax imposed under Section 1411 of the Code, or (iii) the indirect effects on persons who hold equity interests in a holder. This summary also does not consider the taxation of the 2021 Bonds under state, local or non-U.S. tax laws. In addition, this summary generally is limited to U.S. tax considerations applicable to investors that acquire their 2021 Bonds pursuant to this offering for the issue price that is applicable to such 2021 Bonds (i.e., the price at which a substantial amount of the 2021 Bonds are sold to the public) and who will hold their 2021 Bonds as “capital assets” within the meaning of Section 1221 of the Code.

As used herein, “U.S. Holder” means a beneficial owner of a 2021 Bond that for U.S. federal income tax purposes is an individual citizen or resident of the United States, a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), an estate the income of which is subject to U.S. federal income taxation regardless of its source or a trust where a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons (as defined in the Code) have the authority to control all substantial decisions of the trust (or a trust that has made a valid election under U.S. Treasury Regulations to be treated as a domestic trust). As used herein, “Non-U.S. Holder” generally means a beneficial owner of a 2021 Bond (other than a partnership) that is not a U.S. Holder. If a partnership holds 2021 Bonds, the tax treatment of such partnership or a partner in such partnership generally will depend upon the status of the partner and upon the activities of the partnership. Partnerships holding 2021 Bonds, and partners in such partnerships, should consult their own tax advisors regarding the tax consequences of an investment in the 2021 Bonds (including their status as U.S. Holders or Non-U.S. Holders).

Prospective investors should consult their own tax advisors in determining the U.S. federal, state, local or non-U.S. tax consequences to them from the purchase, ownership and disposition of the 2021 Bonds in light of their particular circumstances.

U.S. Holders

Interest. Interest on the 2021 Bonds generally will be taxable to a U.S. Holder as ordinary interest income at the time such amounts are accrued or received, in accordance with the U.S. Holder’s method of accounting for U.S. federal income tax purposes.

To the extent that the issue price of any maturity of the 2021 Bonds is less than the amount to be paid at maturity of such 2021 Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2021 Bonds) by more than a de minimis amount, the difference may constitute original issue discount (“OID”). U.S. Holders of 2021 Bonds will be required to include OID in income for U.S. federal income tax purposes as it accrues, in accordance with a constant yield method based on a compounding of interest (which may be before the receipt of cash payments attributable to such income). Under this method, U.S. Holders generally will be required to include in income increasingly greater amounts of OID in successive accrual periods.

2021 Bonds purchased for an amount in excess of the principal amount payable at maturity (or, in some cases, at their earlier call date) will be treated as issued at a premium. A U.S. Holder of a 2021 Bond issued at a premium may make an election, applicable to all debt securities purchased at a premium by such U.S. Holder, to amortize such premium, using a constant yield method over the term of such 2021 Bond.

Sale or Other Taxable Disposition of the 2021 Bonds. Unless a nonrecognition provision of the Code applies, the sale, exchange, redemption, retirement (including pursuant to an offer by the Authority) or other disposition of a 2021 Bond will be a taxable event for U.S. federal income tax purposes. In such event, in general, a U.S. Holder of a 2021 Bond will recognize gain or loss equal to the difference between (i) the amount of cash plus the fair market value of property received (except to the extent attributable to accrued but unpaid interest on the 2021 Bond, which will be taxed in the manner described above) and (ii) the U.S. Holder's adjusted U.S. federal income tax basis in the 2021 Bond (generally, the purchase price paid by the U.S. Holder for the 2021 Bond, decreased by any amortized premium, and increased by the amount of any OID previously included in income by such U.S. Holder with respect to such 2021 Bond). Any such gain or loss generally will be capital gain or loss. In the case of a non-corporate U.S. Holder of the 2021 Bonds, the maximum marginal U.S. federal income tax rate applicable to any such gain will be lower than the maximum marginal U.S. federal income tax rate applicable to ordinary income if such U.S. Holder's holding period for the 2021 Bonds exceeds one year. The deductibility of capital losses is subject to limitations.

Defeasance of the 2021 Bonds. If the Authority defeases any 2021 Bond, the 2021 Bond may be deemed to be retired for U.S. federal income tax purposes as a result of the defeasance. In that event, in general, a holder will recognize taxable gain or loss equal to the difference between (i) the amount realized from the deemed sale, exchange or retirement (less any accrued qualified stated interest which will be taxable as such) and (ii) the holder's adjusted U.S. federal income tax basis in the 2021 Bond.

Information Reporting and Backup Withholding. Payments on the 2021 Bonds generally will be subject to U.S. information reporting and possibly to "backup withholding." Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate U.S. Holder of the 2021 Bonds may be subject to backup withholding at the current rate of 24% with respect to "reportable payments," which include interest paid on the 2021 Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2021 Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number ("TIN") to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a "notified payee underreporting" described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against the U.S. Holder's federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain U.S. holders (including among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. A holder's failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

Non-U.S. Holders

Interest. Subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "Foreign Account Tax Compliance Act ("FATCA")—U.S. Holders and Non-U.S. Holders," payments of principal of, and interest on, any 2021 Bond to a Non-U.S. Holder, other than (1) a controlled foreign corporation described in Section 881(c)(3)(C) of the Code, and (2) a bank which acquires such 2021 Bond in consideration of an extension of credit made pursuant to a loan agreement entered into in the ordinary course of business, will not be subject to any U.S. federal withholding tax provided that the beneficial owner of the 2021 Bond provides a certification completed in compliance with applicable statutory and regulatory requirements, which requirements are discussed below under the heading "Information Reporting and Backup Withholding," or an exemption is otherwise established.

Disposition of the 2021 Bonds. Subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "Foreign Account Tax Compliance Act ("FATCA,")—U.S.

Holders and Non-U.S. Holders,” any gain realized by a Non-U.S. Holder upon the sale, exchange, redemption, retirement (including pursuant to an offer by the Authority or a deemed retirement due to defeasance of the 2021 Bonds) or other disposition of a 2021 Bond generally will not be subject to U.S. federal income tax, unless (i) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business within the United States; or (ii) in the case of any gain realized by an individual Non-U.S. Holder, such holder is present in the United States for 183 days or more in the taxable year of such sale, exchange, redemption, retirement (including pursuant to an offer by the Authority) or other disposition and certain other conditions are met.

Information Reporting and Backup Withholding. Subject to the discussion below under the heading “Foreign Account Tax Compliance Act (“FATCA”)—U.S. Holders and Non-U.S. Holders,” under current U.S. Treasury Regulations, payments of principal and interest on any 2021 Bonds to a holder that is not a United States person will not be subject to any backup withholding tax requirements if the beneficial owner of the 2021 Bond or a financial institution holding the 2021 Bond on behalf of the beneficial owner in the ordinary course of its trade or business provides an appropriate certification to the payor and the payor does not have actual knowledge that the certification is false. If a beneficial owner provides the certification, the certification must give the name and address of such owner, state that such owner is not a United States person, or, in the case of an individual, that such owner is neither a citizen nor a resident of the United States, and the owner must sign the certificate under penalties of perjury. The current backup withholding tax rate is 24%.

Foreign Account Tax Compliance Act (“FATCA”)—U.S. Holders and Non-U.S. Holders

Sections 1471 through 1474 of the Code impose a 30% withholding tax on certain types of payments made to foreign financial institutions, unless the foreign financial institution enters into an agreement with the U.S. Treasury to, among other things, undertake to identify accounts held by certain U.S. persons or U.S.-owned entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these and other reporting requirements, or unless the foreign financial institution is otherwise exempt from those requirements. In addition, FATCA imposes a 30% withholding tax on the same types of payments to a non-financial foreign entity unless the entity certifies that it does not have any substantial U.S. owners or the entity furnishes identifying information regarding each substantial U.S. owner. Under current guidance, failure to comply with the additional certification, information reporting and other specified requirements imposed under FATCA could result in the 30% withholding tax being imposed on payments of interest on the 2021 Bonds. In general, withholding under FATCA currently applies to payments of U.S. source interest (including OID) and, under current guidance, will apply to certain “passthru” payments no earlier than the date that is two years after publication of final U.S. Treasury Regulations defining the term “foreign passthru payments.” Prospective investors should consult their own tax advisors regarding FATCA and its effect on them.

The foregoing summary is included herein for general information only and does not discuss all aspects of U.S. federal taxation that may be relevant to a particular holder of 2021 Bonds in light of the holder’s particular circumstances and income tax situation. Prospective investors are urged to consult their own tax advisors as to any tax consequences to them from the purchase, ownership and disposition of 2021 Bonds, including the application and effect of state, local, non-U.S., and other tax laws.

OTHER LEGAL MATTERS

Legal matters incident to the authorization and issuance of the 2021 Bonds are subject to the approving opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Corporation. A complete

copy of the proposed form of opinion of Bond Counsel is contained in Appendix E appended hereto. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed upon for the Authority by Richards, Watson & Gershon, A Professional Corporation, for the Corporation by its General Counsel and by its special counsel, Orrick, Herrington & Sutcliffe LLP; and for the Underwriter by its counsel, Stradling Yocca Carlson & Rauth, A Professional Corporation.

EXECUTION AND DELIVERY

This Official Statement has been duly authorized by the Authority and approved by the Corporation.

Approved by:

**CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION**

By: /s/ Ryan Seghesio
Ryan Seghesio, Vice President, Chief Financial Officer
and Treasurer

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APPENDIX A

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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APPENDIX A

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Capitalized terms not defined herein shall have the meanings ascribed to such terms in the forepart of this Official Statement. Prospective purchasers of the 2021 Bonds should review and evaluate all of the information presented in this Appendix A including, but not limited to, a discussion of risk factors herein.

Introduction

General. California Independent System Operator Corporation (the “ISO”) is responsible for the reliable operation of long-distance, high-voltage power lines throughout much of California and part of Nevada. To perform this function efficiently, the ISO administers markets for energy and related services that extend across most of the Western United States, and also serves as Reliability Coordinator for the majority of utilities west of the Rocky Mountains.

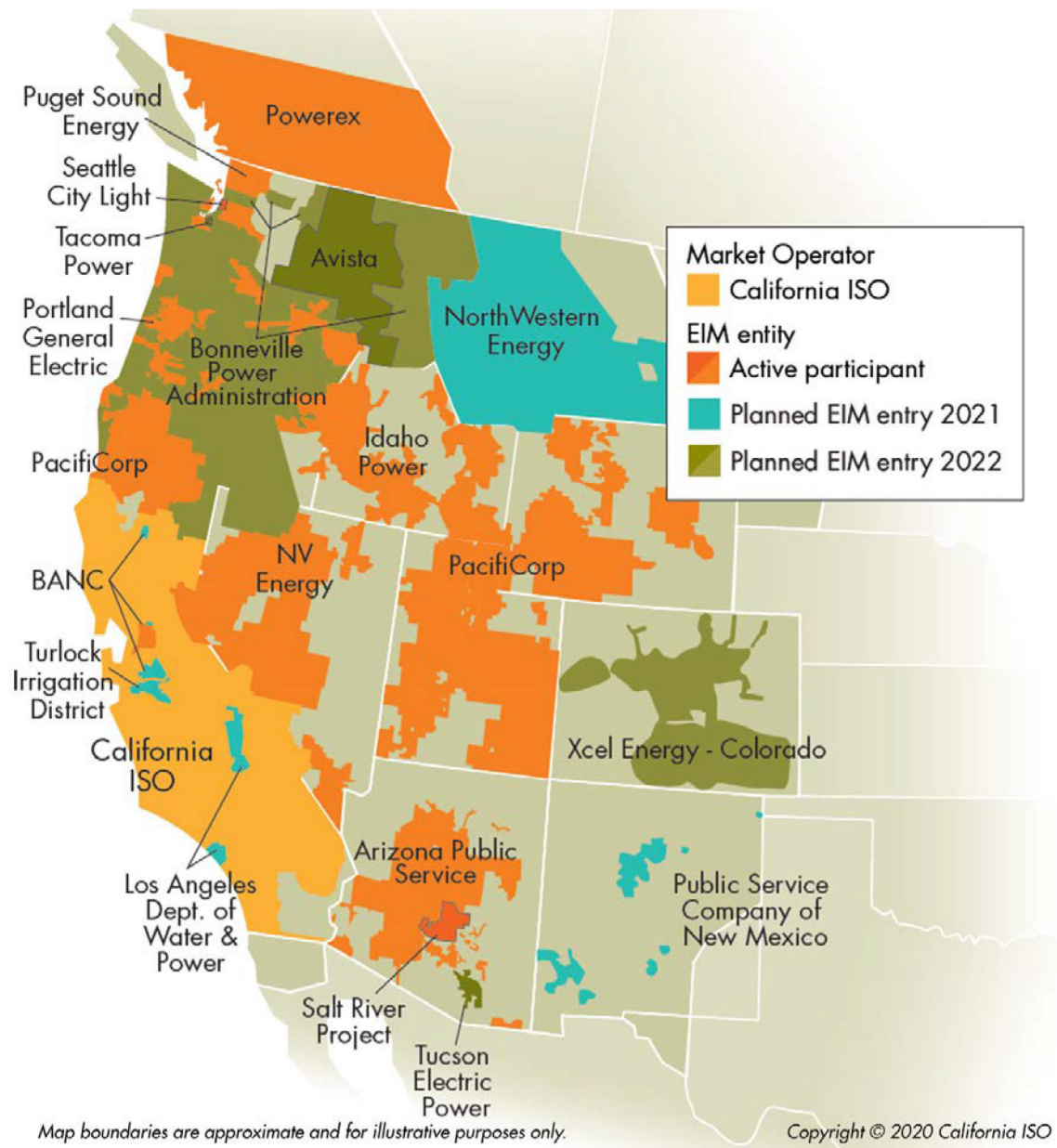
The ISO is a nonprofit public benefit corporation that was incorporated in May 1997 and, beginning March 31, 1998, assumed operational control of the transmission facilities (also called the transmission lines or transmission systems) of the three largest investor-owned electric utilities in California. Since then, sixteen additional utilities have turned over operational control of their transmission systems to the ISO, including seven municipal utilities, eight private transmission-owning corporations, and one cooperatively owned transmission utility, with a seventeenth entity a federal power marketing agency, turning over control of some transmission rights. The ISO now manages the flow of electricity across approximately 26,000 miles of power lines that encompass the “ISO Grid.” The ISO Grid serves approximately 80% of California’s total electrical load and approximately 30 million residents. The ISO also has reliability responsibilities for a broader area known as the ISO balancing authority area (the “ISO Balancing Area”), which involves overseeing the delivery of electricity between the ISO Balancing Area and neighboring balancing authority areas, neighboring states, Canada and Mexico.

Under its tariff (the “Tariff”) on file with and approved by the Federal Energy Regulatory Commission (“FERC”), the ISO provides transmission scheduling services and administers wholesale markets to procure electric energy and capacity necessary to ensure the reliable operation of the transmission systems that it operates. Through these markets, the ISO forecasts the electricity load within the ISO Balancing Area and dispatches the lowest cost power units to meet demand every five minutes. More than 200 companies and other entities participate in the markets, including companies and entities that control hundreds of power plants and other supply resources. The ISO oversees the dispatch of these resources.

The ISO also settles transactions for the wholesale markets that it operates, receiving payments from net debtors, which include buyers of energy, and paying the net creditors, which include sellers of energy. The ISO’s ability to meet its obligations to pay debt service under the 2021 Loan Agreement is dependent on the collection of charges under its Tariff. The ability to collect such charges may be influenced by various factors, many of which are outside the ISO’s control. See “Risk Factors.”

Beginning in 2014, the ISO has operated the Western Energy Imbalance Market (the “EIM”), which extends its real-time energy market to other balancing authority areas in the western interconnection that are not part of the grid the ISO operates. The EIM provides economic and reliability benefits to participants. The broader footprint provides more opportunities to integrate cleaner sources of energy, such as wind and solar, that may be produced in one area while needed in another. Participants pay an EIM administrative fee to the ISO, representing a share of the ISO’s costs of operating the real-time market. See “ISO Charges – General.” Ten other balancing authorities are currently participating and eleven more have committed to participate in the future as indicated on the following map.

Western Energy Imbalance Market



In 2019, the ISO became the Reliability Coordinator for entities within its footprint and for most of the balancing authorities and transmission operators in the West. As the Reliability Coordinator (a business unit known externally as “RC West”), the ISO has the highest level of authority and responsibility for the reliable operation of the power grid, and has a wide-area view of the bulk electricity system. It is required to comply with federal and regional grid standards, and can authorize measures to prevent or mitigate system emergencies in day-ahead or real-time operations. The ISO is currently the Reliability Coordinator of record for forty-two balancing authorities and transmission operators in the West.

In addition, the ISO administers reliability must-run (“RMR”) contracts. These RMR contracts give the ISO access to power at contractually agreed-upon prices from generation units that, because of their location and other factors, must be operated at certain times to ensure the reliability of local transmission. The ISO also has authority to dispatch certain other generating units as necessary to maintain system reliability.

The ISO Market. The ISO’s wholesale energy market is the vehicle for providing open-access transmission service to users of the transmission grid. It includes an “Integrated Forward Market” that optimizes the use of supply resources for all twenty-four hours of the next operating day, and a real-time market that schedules resources in 15 minute intervals and dispatches them in 5 minute intervals. These markets clear supply and demand offers for the three main services used to operate the ISO Grid: energy, ancillary services and congestion management. Beginning one day ahead of operations, the forward market determines the optimal and least cost use of resources available to meet scheduled energy requirements and to provide necessary reserves in a manner that avoids the creation of congestion. The real-time market clears supply offers and the ISO’s forecast of demand.

Together, these markets enable the economic scheduling and dispatch of supply resources to maintain continuous balance of supply and demand and management of congestion on the grid, and to maintain reliable operation under unexpected changes in grid conditions.

The markets use a locational marginal pricing paradigm with more than 3,000 points or “nodes” in California, which calculates the price of producing power at a given location and delivering it to another location. Distinct nodal prices help determine the most cost-effective use of resources to resolve transmission congestion by providing more information about the real cost of delivering power to customers than was previously possible under the zonal pricing system. This enables buyers and sellers to make informed decisions about energy pricing based on the ability to produce and deliver power to where it is needed and, over time, will help identify the best areas to build new generation.

The markets operate on an advanced, flexible platform that helps integrate renewable resources as well as demand response. These enhancements increase the functionality and flexibility of the market system to meet the ongoing needs of market participants. The ISO continues to develop market enhancements to increase reliability, efficiency and the accuracy of market results.

Operations, Assets and Tariff

The ISO exercises operational control over the electricity transmission systems owned by twenty entities, including the three largest investor-owned electric utilities in California, which are Pacific Gas and Electric Company (“PG&E”), Southern California Edison Company (“SCE”) and San Diego Gas & Electric Company (“SDG&E”), as well as the California cities of Anaheim, Azusa, Banning, Colton, Pasadena, Riverside and Vernon, Citizens Sunrise Transmission, LLC, Citizens Sycamore-Penasquitos Transmission, LLC, Desertlink, LLC, GridLiance West, LLC, Horizon West Transmission, LLC, Startrans IO, LLC, Trans Bay Cable, LLC, Trans-Elect NTD Path 15, LLC, Valley Electric Association, Inc., and the portion of Path 15 transmission lines owned by the Western Area Power Administration–Sierra Nevada Region. All transmission assets that the ISO operates are owned by these participating transmission owners (the “PTOs”). The ISO does not own any transmission assets.

Transmission Control Agreement. The terms and conditions under which PTOs place transmission facilities and entitlements under ISO operational control are established in the Transmission Control Agreement (the “TCA”). The TCA provides that the PTOs remain responsible for upgrades and improvements to the lines as well as constructing new transmission lines and supporting facilities needed to serve their respective service territories. FERC has formally approved the TCA among the ISO and the above-referenced PTOs and has accepted the presently applicable Tariff. FERC-approved amendments are periodically made to the TCA to add new transmission owners and for other purposes, as recently as August 2018. A copy of the current TCA is available at: <http://www.caiso.com/Documents/TransmissionControlAgreement.pdf>.

Any PTO may withdraw from the TCA without penalty upon two years’ prior written notice to certain designated parties and by obtaining any necessary regulatory approval. Any transmission owner may also sell or otherwise dispose of lines or associated facilities forming part of the ISO Grid subject to the ISO’s prior written consent and the transferee assuming all of the transmission owner’s obligations under the TCA. No significant participant has ever withdrawn from the TCA. Withdrawal of the transmission facilities of one of the three major California investor-owned utilities would likely have an adverse impact on the ISO. However, as described in “Risk Factors – Contractual Rights and Withdrawal,” ISO believes that participation in ISO provides significant financial and operational benefits to all of the participants, including the investor-owned utilities.

Tariff. The ISO operates pursuant to a FERC approved Tariff. The Tariff contains detailed provisions governing all aspects of the ISO’s operations, including access to the ISO Grid, roles and responsibilities of market participants, scheduling coordinators and PTOs, system operations, ancillary services, settlements and billing, transmission service and expansion, interconnection of generating facilities to the ISO Grid, transmission rates and charges, market operations, trades between scheduling coordinators, day-ahead, hour ahead and real-time markets, firm transmission rights, enforcement protocols, market monitoring, market power mitigation and resource adequacy.

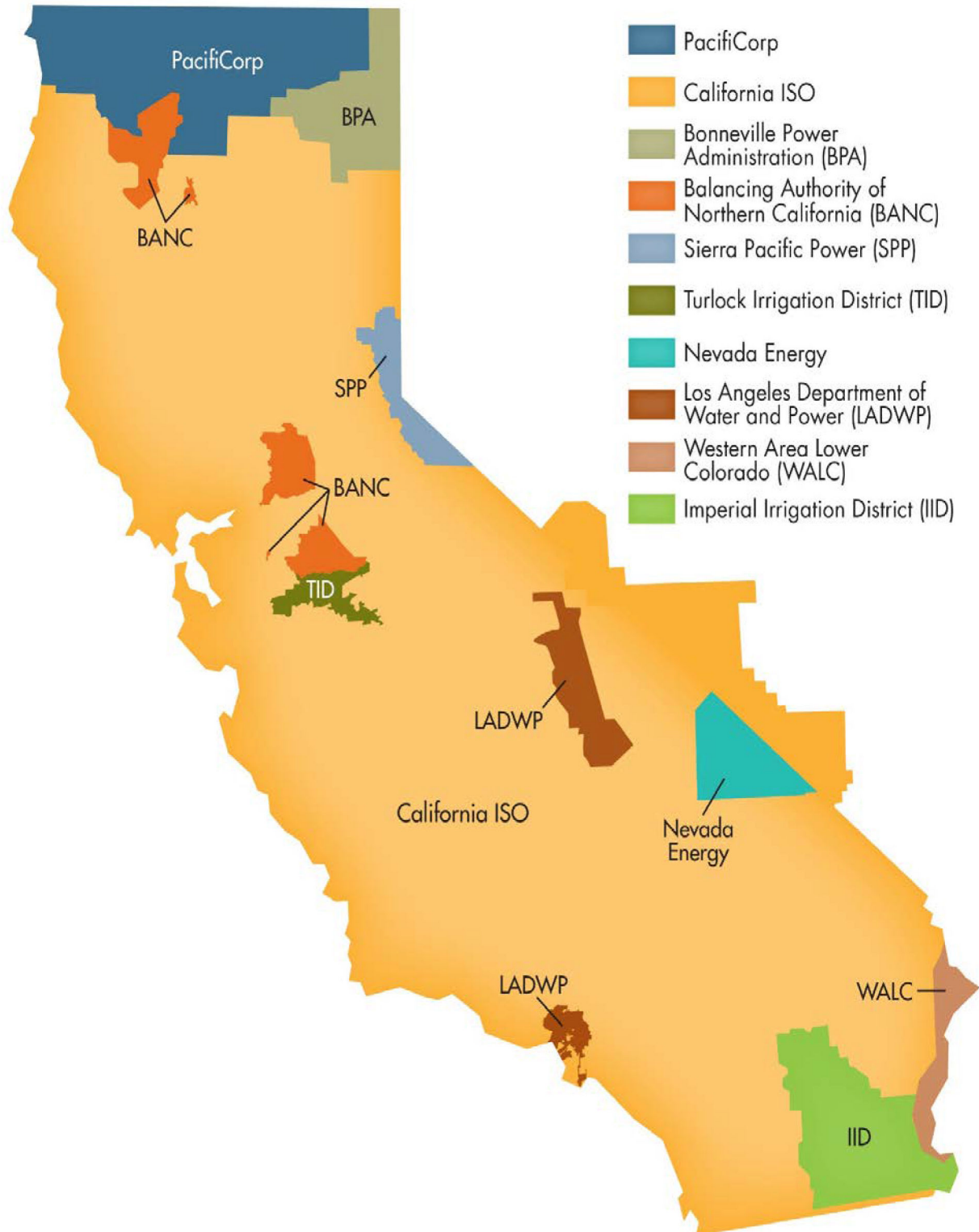
A copy of the ISO’s Tariff as of December 1, 2020, is available at [<http://www.caiso.com/Documents/Conformed-Tariff-as-of-Dec1-2020.pdf>].

Overview of the ISO Transmission System

The ISO Grid is a long-distance, high-voltage transmission system. It delivers wholesale electricity to local utilities for distribution to approximately 30 million Californians and is one of the largest wholesale electric grids in the world, encompassing three quarters of the state of California and transmitting approximately 307-billion kilowatt hours of electricity each year.

State of California Balancing Authority Areas

[Yellow] Shaded Area Represents the California ISO Balancing Authority Area with 230 kV/500 kV High Voltage Network and Major Substations



The ISO Charges

ISO Charges – General. The ISO has authority to recover its costs through the assessment of various charges, collectively known as the Grid Management Charge (“GMC”). The ISO also receives revenues through EIM administrative fees, reliability coordinator charges, contractual payments or other direct reimbursements.

In addition to the GMC, the ISO also settles transactions for the wholesale markets that it operates. The ISO issues market settlement charges (the “Market Settlement Charges”) to buyers of capacity, energy, transmission and other related services and products, and issues equal credits to the suppliers. On a weekly basis, net debtors remit payment for net Market Settlement Charges into an ISO bank account, from which the ISO makes payment to the net creditors. Except for the GMC, and subject to certain exceptions described herein, the foregoing payments are “market-related receipts” (the “Market-Related Receipts”) and are remitted by the ISO to the appropriate market participants.

Priority Claim Against Market Related Receipts. In the event of a payment default by a market debtor, the ISO does not bear the risk of loss; rather other market participants bear the shortfall on a pro-rata basis. As a result, energy market transactions do not directly affect the ISO’s financial results. Moreover, in the event of a payment default by a party billed for the GMC, the Tariff grants the ISO a priority claim against any Market-Related Receipts. If such a default occurs, the ISO is entitled to collect the GMC from Market-Related Receipts, and the resulting shortfall would be borne by market participants. Since the inception of the ISO, all GMC invoices have been paid in full either directly or through market funds. All market creditors have been paid in full and on time since the energy crisis of 2000-2001. See “California Energy Crisis and Related Issues.”

Total market settlement collections (“Market Settlement Collections”) from market participants (including Market-Related Receipts and GMC) have far exceeded the GMC collections, as illustrated in the table below. GMC collections include only revenues resulting from assessment of the GMC. Other revenues that may accrue through contractual agreements and direct reimbursements are not included in the figures. The annual coverage ratios shown below are indicative — each “trade month” is financially cleared separately and as a result, coverage varies by month. See “Funds and Accounts” below.

Coverage of GMC by Total Market Settlement Collections

Unaudited, \$ in millions	2019	2018	2017	2016	2015
GMC Collections*	\$203	\$207	\$200	\$198	\$198
Market-Related Receipts	<u>\$4,532</u>	<u>\$4,905</u>	<u>\$3,556</u>	<u>\$3,189</u>	<u>\$3,498</u>
Total Market Settlement Collections (MSC)	\$4,735	\$5,112	\$3,756	\$3,387	\$3,696
Coverage MSC/GMC	23.4	24.7	18.8	17.1	18.7

*GMC Collections represent the GMC rates and fees calculated as part of the net revenue requirement (planned expenses and debt service less other revenue and operating cost reserve adjustments).

Funds and Accounts. All GMC and Market-Related Receipts are required to be initially deposited in certain ISO bank accounts established with a commercial bank, including the market clearing account. If a market participant defaults on its GMC obligation, the ISO can nevertheless collect the full amount of the GMC billed for that week because the ISO has a priority claim against any funds in the market clearing account, including Market-Related Receipts and any financial security posted by the defaulting market participant. The historical annual coverage ratios of total Market Collections to GMC collections available are shown in the table above. The ISO transfers the GMC funds from the market clearing account to an operating account held with the same commercial bank. The ISO invests excess funds in fixed income mutual funds and securities that are held at a custody bank, subject to the investment policy described under “Investment Policy.”

The Tariff provides the ISO with the right to recoup, set-off or recover past-due GMC amounts owed from any amounts that would otherwise currently be paid to a market participant.

Market Participant Credit Standards. The ISO’s credit standards for market participants are specified in the Tariff. The Tariff provides that each market participant must secure its financial obligations to the ISO by maintaining an unsecured credit limit (“Unsecured Credit Limit”) and/or by posting financial security. The total of a market participant’s Unsecured Credit Limit and its posted financial security must equal or exceed the market participant’s Estimated Aggregate Liability (“EAL”) at all times. A particular market participant’s Congestion Revenue Rights holdings (“CRRs”) can impact a market participant’s EAL calculations and therefore, whether a market participant has additional collateral posting requirements. CRRs are financial instruments that enable market participants to reduce their congestion-related price risk when delivering or selling energy on the ISO Grid. A CRR provides an economic hedging mechanism against congestion charges that can be transacted by market participants separately from transmission service. These instruments are considered derivative financial instruments for accounting purposes, which would require presentation at fair value if they were recognized as assets and liabilities of the ISO. A market participant holding a portfolio of CRRs that has a negative revenue stream (meaning that the portfolio is incurring charges rather than earning revenues) will result in an increase to the market participant’s EAL if there is insufficient revenue to offset the negative revenue stream. The resulting increase to a market participant’s EAL could result in a collateral call if the market participant does not have a sufficient amount of collateral posted. All CRR obligations are backed by a secured form of collateral which is designed to mitigate CRR default risk.

Consistent with its role in facilitating other market transactions, the ISO facilitates the allocation, auctioning and ultimate settlement of CRRs in its market, but as described under “ISO Charges – General” above, the ISO does not bear the risk of loss in the event of a payment default. Any market defaults are allocated to market participants. As a result, CRR transactions do not directly affect the ISO’s financial results. However, unlike other market transactions, CRRs can be outstanding for extended periods of time. At December 31, 2019, the average life of the ISO’s CRRs was 7.84 years and there are a total of 99 CRR holders. The estimated net fair value of both the CRR assets and liabilities as of December 31, 2019 was \$841.4 million related to a total of 713,388 megawatts, which vary in length from one month to several years. The value of each megawatt of CRR is a function of numerous factors including the length of period the CRR covers. While these amounts are not presented in the statements of net position in the ISO’s audited financial statements, their estimated net fair value is disclosed in such financial statements for

informational purposes given their longer term nature. For a further discussion, see Note 7 to the ISO's December 31, 2019 and 2018 financial statements in APPENDIX B – "AUDITED FINANCIAL STATEMENTS OF THE CORPORATION."

Unsecured Credit Limits may be granted to market participants who apply for unsecured credit and supply the ISO with their latest financial statements and other information necessary for it to conduct an evaluation. The amount of Unsecured Credit Limit is based on a percentage of a market participant's tangible net worth or net assets depending on whether such participant is a corporate or governmental entity, respectively. The approach used to grant Unsecured Credit Limits differs depending on whether the market participant is a rated or unrated public or private corporation or a rated or unrated governmental entity. In general, the ISO uses a formula that considers available credit ratings and credit ratings published by Moody's Analytics based on their proprietary Estimated Default Frequency. Each market participant that requests an Unsecured Credit Limit is subject to a potential reduction of its calculated Unsecured Credit Limit by as much as 100% based on the ISO's assessment of qualitative factors relating to the market participant, material changes to the market participant's financial condition and other factors described in the Tariff. A market participant's Unsecured Credit Limit undergoes reevaluation as new financial information becomes available, and reductions may occur at any time. Currently, the maximum Unsecured Credit Limit that an entity could receive is \$50 million. As of, December 31, 2019, 31 market participants qualify for the maximum Unsecured Credit Limit. The ISO monitors market participants' ongoing obligations to wholesale markets through a daily evaluation of their estimated aggregate liability. Should the liability reach 90% of the Unsecured Credit Limit and any other deposited financial security, the ISO notifies the market participant that they may wish to post additional collateral. Once liabilities exceed 100% of a market participant's Unsecured Credit Limit and any other deposited financial security, the market participant is notified that they must post additional collateral within two business days of the notification. During the time that a collateral notification remains uncured, the market participant would be unable to place bids into the CRR and convergence bidding markets. See "Risk Factors – Market Participant Concentration" and the customer concentration tables in "FERC Process for Revisions to GMC Rates."

Limitations on Liability. The Tariff provides that the ISO shall not be liable for damages to any market participant for any losses, damages, claims, liability, costs or expenses (including legal expenses) arising from the performance or non-performance of its obligations under the Tariff, except to the extent they result from gross negligence or intentional wrongdoing on the part of the ISO. Moreover, the Tariff provides that the ISO shall not be liable to any market participant under any circumstances for any consequential or indirect financial loss including but not limited to loss of profit, loss of earnings or revenue, loss of use, loss of contract, or loss of goodwill except to the extent that it results from gross negligence or intentional wrongdoing on the part of the ISO.

Wildfires caused by electric transmission or distribution lines have been the subject of increasing attention in California. The ISO does not own or maintain the transmission lines that it operates, and has not been the subject of any claims related to such wildfires. While the ISO does review its PTOs' compliance with their maintenance standards under a contract, the participating transmission owners have agreed to indemnify the ISO against all losses arising from third-party claims that result from any act or omission of the PTO.

The ISO maintains broad-form insurance coverage for errors and omissions, general liability and professional liability related to its services as an independent system operator.

Grid Management Charge

Development of the GMC Revenue Requirement. GMC revenues fund substantially all of the costs of the ISO's operations, which are established in the annual revenue requirement. The Tariff contains procedures for the ISO to follow in developing the revenue requirement, which includes an annual budgeting process and culminates in approval by the Governing Board (the "Board") for the subsequent fiscal year. The revenue requirement consists of ISO Operating Costs, ISO Financing Costs, ISO Cash-Funded Capital and Project Costs, ISO Other Costs and Revenues and ISO Operating Cost Reserve Adjustment (as defined below under "ISO Operating Reserve"). ISO Financing Costs (debt service) includes principal and interest on all outstanding indebtedness of the ISO, including the ISO's obligation to make payments of principal and interest with respect to the Series 2021 Bonds (as defined below). The budgeting process includes stakeholder input on ISO costs, potential capital budget projects and ISO priorities in the coming year. Once the Board approves the budget, the ISO posts the annual GMC revenue requirement (including operating and capital budgets) and the resulting rates on its website. The ISO also posts the billing determinant volumes used to develop the rate for each GMC and other charges.

Development of the GMC Rates and Rate Structure. The ISO annual revenue requirement serves as the basis for determining the GMC rates. Once the GMC revenue requirement is determined, it is allocated among the three service categories: (1) Market Services; (2) System Operations; and (3) Congestion Revenue Rights Services. The allocation of the GMC revenue requirement to each service category includes a component reflecting 125% of the allocated debt service. See "Debt Service Coverage" below. The GMC rates for the different services are assessed through various billing determinants, including scheduled energy and energy flows and other volumetric, transactional or fixed amounts.

The GMC rates are revised at least annually to reflect changes in the revenue requirement and changes in the forecasted billing determinant volumes. See "FERC Process for Revisions to GMC Rates" below. The GMC rates are reviewed monthly and may be adjusted quarterly if projected annual billing determinant volumes differ by the greater of: 2% from volumes used to set rates or \$1.0 million in estimated annual GMC revenues. Neither FERC nor Board approval is required for the ISO to implement these quarterly changes.

The structure of the GMC rates is revised periodically to reflect changes in the ISO service offerings and in response to customer requests. As described in "FERC Process for Revisions to GMC Rates," federal regulators must approve these changes prior to implementation.

ISO Operating Reserve. The ISO maintains an operating reserve (the "ISO Operating Reserve") to absorb the financial impact of monthly variances between forecasted and actual revenues and expenses. The ISO Operating Reserve is a component of the ISO's cash and investment balances. For purposes of establishing the GMC rates, the ISO Operating Reserve requirement is calculated separately for each service category. The ISO Operating Reserve is annually adjusted to equal 15% of that year's operations and maintenance budget (the "Operating Cost Reserve Adjustment"). As of December 31, 2020, the ISO Operating Reserve for each service

category was fully funded and totaled \$29.2 million. In accordance with the Tariff, any surplus ISO Operating Reserve balance exceeding 15% of budgeted annual operating costs for each rate service category is applied as a reduction in the revenue requirement for each service category in the following year. The Tariff provides that, if the ISO Operating Reserve balance fails to meet the 15% reserve requirement, the revenue requirement is adjusted to make up any shortfall, which may be spread out over two years.

The ISO Operating Reserve is not a segregated account, but is a component of the unrestricted assets of the ISO. Unrestricted assets are comprised of GMC or other revenue collected for operating expenses, capital projects and reserves, and debt payments and reserves.

Balance of Unrestricted Assets as of December 31

(in millions)

2019	2018	2017	2016	2015
\$220.1	\$213.2	\$195.6	\$168.4	\$169.4

Source: Audited financial statements

FERC Process for Revisions to GMC Rates. FERC may approve a “formula rate” which considers updated costs in recalibrating the GMC without the need for the ISO to make a new rate filing. In 2004, the ISO received FERC approval for its Tariff that contained both a formula GMC rate and a revenue requirement “cap.” The combination of the GMC formula rate and revenue cap allows the ISO and Board to set the annual GMC revenue requirement and resulting rates without a FERC proceeding. In approving the formula rate and revenue requirement cap, FERC added provisions requiring the ISO to post on its website specific documentation in support of its revenue requirement in lieu of a regulatory filing. The Tariff requires publishing certain budget related information and holding stakeholder meetings to discuss proposed changes in the revenue requirement and GMC rates. See “Development of the GMC Rates and Rate Structure” above. This Tariff mechanism has reduced the need for annual rate filing submissions to FERC and has reduced the likelihood of litigation over the level of the revenue requirement and the GMC rate structure. Since 2004, the ISO has received additional FERC approval to continue to operate under the formula rate and revenue requirement cap mechanisms, without the need for annual revenue requirement and rate proceedings.

In December 2011, FERC approved the current GMC rate service components that were modified to reflect the costs associated with design of the ISO Market, with a revenue requirement cap of \$199 million. This rate structure was in effect through the end of 2014. In December 2014, FERC approved a \$3 million increase in the ISO’s revenue requirement from \$199 million to \$202 million with no sunset date. Since that time, the GMC revenue requirement has been below the \$202 million cap; see the Annual GMC Revenue Requirement table below. In place of the sunset date, the ISO proposed to revise its Tariff to reflect an obligation to conduct a cost-of-service study in consultation with stakeholders on a regular, three-year cycle. In accordance with the Tariff, the

ISO has filed cost category changes and fee changes with FERC according to the cost of service studies completed in 2017 and 2020.

From an accounting standpoint, GMC revenues are realized when the related energy transactions take place. The GMC is billed weekly and collected approximately seven days after each trade week. GMC and other market service billings are dependent upon accurate generation, load and other information, much of which is gathered using meter data, some of which is subject to estimation by the ISO. Adjustments are made to the estimates when actual meter data subsequently becomes available under specific circumstances. When adjustments result in revisions to GMC billings after invoices have been issued to participants, the adjustments are reflected on subsequent invoices.

Debt Service Coverage Requirement. Consistent with the Tariff, the 2021 Loan Agreement requires, as long as the 2021 Bonds are outstanding, the ISO will not, among other things, file an amendment to the Tariff that eliminates the requirement that GMC rates and budgeted revenue requirement are set annually to cover 125% of required debt service payments. See “SECURITY FOR THE BONDS – Tariff Covenant” in the forepart of this Official Statement. On December 30, 2020, FERC authorized the ISO to issue debt consistent with the terms of this offering.

The following table presents the ISO’s annual GMC revenue requirement for the most recent five years. Annual debt service and the 25% reserve are required components of the revenue requirement. In addition, for each year indicated, the ISO Operating Cost Reserves, set at 15% of operating expenses, was over-funded, with the excess used to reduce the GMC revenue requirement in subsequent years through the Operating Cost Reserve Adjustment. See “ISO Operating Reserve” above. As described in “The ISO Charges - Priority Claim Against Market-Related Receipts” in the event of a payment default by a party billed for the GMC, the Tariff grants the ISO a priority claim against any Market-Related Receipts. If such a default occurs, the ISO is entitled to collect the GMC from Market-Related Receipts. Although the GMC is calculated using the various components set forth in the table below, all of the GMC is legally available for the payment of amounts payable by the Corporation pursuant to the 2021 Loan Agreement.

Annual GMC Revenue Requirement (Unaudited)

GMC Revenue Requirement (in millions)	2020	2019	2018	2017	2016
Operations and maintenance budget	\$195.0	\$189.0	\$178.5	\$173.6	\$169.3
Cash funded capital	28.0	25.0	22.0	24.0	24.0
Other costs and revenues	(41.3)	(23.9)	(16.7)	(13.3)	(10.8)
Operating cost reserve adjustments	(11.6)	(13.5)	(3.5)	(5.9)	(4.1)
Subtotal	\$170.1	\$176.6	\$180.3	\$178.4	\$178.4
Debt service (principal and interest)	13.5	13.5	13.5	13.5	13.5
Debt service (25% reserve)	3.4	3.4	3.4	3.4	3.4
Total GMC revenue requirement	\$187.0	\$193.5	\$197.2	\$195.3	\$193.3

Source: The ISO approved budgets and rate filings or postings.

* Totals are adjusted for rounding.

Claims and Disputes. Since commencement of operations in 1998, the ISO’s GMC has been challenged by various market participants in proceedings before FERC. Market participants

have at times protested the allocation of the ISO's revenue requirement among GMC service categories and the billing determinants used to establish the rates for each of the GMC service categories. Currently (as of January 14, 2021), all past GMC rates are final and are not subject to further refund.

Market Billing Disputes in Good Faith Negotiations. As part of its Tariff and applicable contracts, the ISO has dispute resolution processes for market participants, transmission owners and RMR owners to register disagreements regarding information reflected in the settlement statements or billing amounts for market and RMR activity. Market disputes are addressed in the normal course of operations, some of which result in adjustments to previous settlements. When adjustments are made, the adjustment amounts are reallocated to market participants, with no net cost or credit being realized by the ISO. With respect to pending market disputes at December 31, 2020, including those that have escalated to good faith negotiations, Management believes that any settlements or market adjustments would be resettled against the market with no liability to the ISO.

Financial Information

The selected financial information set forth below has been obtained from the ISO's audited financial statements prepared under Generally Accepted Accounting Principles. The ISO's rates are set annually using a modified basis of accounting, with the primary difference being the recovery of debt service costs in the annual revenue requirement and cash funded capital project expenses instead of depreciation and amortization. Accordingly, the ISO establishes rates to collect 125% of scheduled annual debt service instead of depreciation and amortization (See "Grid Management Charge - Debt Service Coverage" above). All of the financial data is as of December 31 or for the fiscal year ended December 31, as applicable.

Condensed Statements of Net Position (in millions)	2019	2018	2017	2016	2015
Assets					
Current assets					
Cash and cash equivalents	\$366.4	\$324.9	\$332.8	\$363.5	\$326.9
Other current assets	104.2	98.7	71.1	72.6	75.7
Total current assets	470.6	423.6	403.9	436.1	402.6
Fixed assets, net	170.9	167.1	178.9	187.2	175.0
Other noncurrent assets	207.2	172.3	157.9	168.6	152.2
Total assets	\$848.7	\$763.0	\$740.7	\$791.9	\$729.8
Liabilities and Net Position					
Liabilities					
Current liabilities	\$473.2	\$398.9	\$380.2	\$446.7	\$391.5
Long term debt, net	170.0	175.8	181.4	186.8	192.0
Other noncurrent liabilities	19.0	22.0	17.2	17.1	12.5
Total liabilities	662.2	596.7	578.8	650.6	596.0
Net position	186.5	166.3	161.9	141.3	133.8
Total liabilities and net position	\$848.7	\$763.0	\$740.7	\$791.9	\$729.8

Condensed Statements of Revenues, Expenses and Changes in Net Position (in millions)	2019	2018	2017	2016	2015
Operating revenues	\$222.7	\$223.9	\$220.6	\$212.0	\$213.5
Operating expenses	205.6	213.8	194.9	198.0	191.9
Operating income	17.1	10.1	25.7	14.0	21.6
Other income (expense)	3.1	(5.7)	(5.1)	(6.5)	(8.3)
(Decrease) increase in net assets	20.2	4.4	20.6	7.5	13.3
Net position, beginning of year	166.3	161.9	141.3	133.8	111.5
Net position, end of year	\$186.5	\$166.3	\$161.9	\$141.3	\$133.8

See “Management’s Discussion and Analysis” in the ISO’s December 31, 2019 and 2018 financial statements in APPENDIX B – “AUDITED FINANCIAL STATEMENTS OF THE CORPORATION” for a discussion of certain results.

Source: Audited financial statements.

Current Year Financial Information. The selected unaudited comparative financial information set forth below shows the results of the ISO’s operations for the nine months ending September 30, 2020 and 2019, respectively

Statements of Revenues, Expenses and Changes in Net Position (Unaudited) Nine Months Ending September 30 (in thousands)	2020	2019
Operating revenues		
GMC revenue	\$146,119	\$146,514
Other revenues	33,624	13,921
Total operating revenues	179,743	160,435
Operating expenses		
Salaries and related benefits	107,131	97,637
Equipment leases and facility costs	1,519	1,413
Communications, technology and temporary staffing contracts	14,854	14,043
Legal and consulting services	8,154	8,588
Training, travel and professional dues	734	1,613
Insurance, administrative and other expenses	5,638	5,205
Depreciation and amortization	19,463	20,700
Total operating expenses	157,493	149,199
Operating income from operations	22,250	11,236
Other income (expense)		
Interest income	7,251	8,019
Interest expense	(6,142)	(6,399)
Total other income, net	1,109	1,620
Change in net position	23,359	12,856
Net position, beginning of year	186,460	166,307
Net position, end of year	\$209,819	\$179,163

Operating revenues increased in 2020 due to higher other revenues from fees collected for the new reliability coordinator service. This was partially offset by slightly lower GMC revenues. Operating expenses increased primarily due to higher salaries and benefits, partially offset by

reduced training and travel expenses. To date, the ISO has experienced a variety of costs associated with COVID-19 but these have been offset by savings in areas such as travel and meeting expenses.

Debt Obligations. The 2021 Bonds, as described in the Official Statement, will be the ISO's only debt obligation outstanding. The ISO has no current plans to issue additional debt.

5-year Capital Plan. The ISO's current capital plan provides for expending approximately \$100 million over the next five years. Future projects may include: replacement of current settlement and congestion revenue rights systems, implementing an extended day ahead market, continued enhancements to the new energy management system, contingency modeling enhancements, resource adequacy enhancements, and resource interconnection management system changes. Strategic initiatives include improving systems and operation tools, improving forecasting, incorporating distributed resources, enhancing technology foundation and renewable integration and smart grid studies. The ISO will utilize capital funding that is contained in its annual GMC revenue requirement or capital reserves to finance these improvements.

Retirement Benefits and Other Post-Employment Benefits (OPEB). The ISO sponsors a defined contribution retirement plan, the ISO Retirement Savings Benefits Plan (the "Retirement Plan") that is subject to the provisions of the Employee Retirement Income Security Act of 1974 and covers substantially all employees. The Retirement Plan is administered by the ISO with the assistance of a third party.

In addition, the ISO sponsors the ISO Retirees Medical Plan, a defined benefit plan that provides post-employment health care benefits to all eligible employees who retire from the ISO and meet certain eligibility requirements. As of January 1, 2019, the Plan was closed to new hires and rehires. Additionally, eligibility for retirement was changed to age 55 with at least 10 years of continuous service, for employees whose combined age and years of continuous service at retirement equals or exceeds 70. Plan benefits are available to eligible retirees and to their spouses, domestic partners and eligible dependents, as provided for under the terms of the plan. The ISO's annual OPEB contributions for the ISO Retirees Medical Plan is calculated based on an amount actuarially determined in accordance with Governmental Accounting Standards Board (GASB) Statement No.75, "*Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*". The annual OPEB contributions represent a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 15 years (using the level dollar open method). The annual OPEB contributions are adjusted for the amortized amount of the discounted present value (ordinary annuity) of the balance of the net OPEB obligation at the beginning of the year. For the years ended December 31, 2019 and 2018, the annual contributions to the plan were \$4,987,000 and \$841,000 respectively. The total OPEB obligation at December 31, 2019 and 2018 was \$22,517,000 and \$25,537,000, respectively. At January 1, 2020 and 2019, the net OPEB obligation was \$5,477,000 and \$15,164,000 respectively. The ISO currently funds an amount equal to the actuarially determined liability attributable to those who have become eligible to receive benefits at retirement pursuant to a tax-exempt voluntary employees' beneficiary association trust. Trust assets amounted to \$17.0 million as of December 31, 2019.

The ISO sponsors the Executive Savings Plan, a nonqualified defined contribution plan under section 457(b) of the Internal Revenue Code. The ISO contributes a percentage of each ISO officer's annual base compensation to the plan. Officers may elect to make voluntary contributions, subject to statutory limitations.

The ISO also sponsors the Executive Pension Restoration Plan, a non-qualified defined contribution plan, which allows certain ISO officers to make contributions and receive ISO contributions in excess of the 401(k) contribution limits set forth by IRS regulations.

For a further discussion, see Note 9 to the ISO's December 31, 2019 and 2018 financial statements in APPENDIX B – "AUDITED FINANCIAL STATEMENTS OF THE CORPORATION."

Investment Policy. The ISO's investment policy, which has been approved by its Board, restricts investments to certain obligations: those which are issued by, or explicitly guaranteed by, the United States Government, debt obligations issued by government sponsored enterprises and supranational agencies, municipal and state obligations, corporate debt obligations, bank obligations, repurchase and other types of investment agreements, fixed income mutual funds, and money market funds. The ISO's investment policy includes restrictions relating to maximum amounts per asset class as a percentage of the total portfolio, maturities not to exceed five years, and minimum credit ratings (A-1 (or equivalent) for short-term obligations and A- (or equivalent) for long-term obligations at the time of purchase by at least two of S&P, Moody's or Fitch). The ISO's investment of bond related proceeds is also subject to the restrictions established in the Indenture of Trust and other bond related documents.

Other ISO Activities

The ISO also performs other important electric industry functions in addition to managing the ISO Balancing Area. The ISO fosters industry collaboration to ensure that California's electricity infrastructure continues to support reliable grid operations and efficient wholesale markets. Each year the ISO also produces a long-range plan to quantify load growth and system changes and to identify new projects needed for economic and reliability reasons. This broad perspective on transmission planning helps improve customer access to clean, efficient generation and increases overall system reliability. At the request of developers, the ISO also conducts generator interconnection studies to determine the feasibility of connecting generating resources to the ISO Grid.

The ISO reduces barriers to renewable energy sources, such as wind and solar power, by ensuring its rules and procedures fairly treat those resources in their efforts to interconnect to the ISO Grid. This is instrumental in assisting the State of California in reaching its renewable portfolio standard goals, as well as achieving future goals now under consideration by state and federal legislators.

The ISO uses demand side management programs during peak hours on high-demand days to balance supply and demand on the power system.

Timely and accurate information is essential for an effective and competitive marketplace. The ISO provides transparent information about the electric transmission system and prices.

Economists within the ISO's Department of Market Monitoring observe and audit market activity by reviewing prices and investigating potential instances of market power abuse.

Other initiatives are further described in the "Financial Information – 5-year Capital Plan."

ISO Facilities

The ISO currently operates two control centers around the clock, seven days a week. The main control center is located in an approximately 278,000 square foot facility, constructed in 2010, in Folsom, California with the data center and control room space of approximately 25,500 square feet. The data center is designed for compliance with NERC CIP standards by separating out production from nonproduction systems and networks. The control room is designed for enhanced usability including an 85-foot video display wall with state of the art geospatial visualization technology that provides the operators with accurate, timely and convenient information to reliably run the electrical grid and the ISO market.



At the completion of construction, the headquarters building was certified LEED Platinum status. LEED (Leadership in Energy and Environmental Design) certification requires many design elements including:

- Under floor ventilation
- Window shading
- "Smart" building system to reduce energy and maintenance costs

- Recycling and waste diversion
- Drought-tolerant landscaping using 100% reclaimed water
- Passive solar design to reduce electricity by using natural lights and reducing heat gain
- White “cool roof” to reduce urban heat island effect
- 40% more fresh air to improve indoor air quality through ventilation technology
- Targeted energy consumption 39% better than California energy code requires

In 2016, using many of the same design elements, the ISO constructed with capital reserves a second fully functioning facility and control center in Lincoln, California. This backup facility is staffed 24 hours per day and is ready to assume control of the ISO Grid if needed.

Board of Governors and Executive Officers

Board of Governors. The Board of Governors oversees the ISO and is composed of five members appointed by the Governor of the State of California and confirmed by the California State Senate. Board members serve for staggered three-year terms. As of November 30, 2020, the Board had only four members due to a recent retirement. Additional information on governance matters is available at www.caiso.com.

Angelina Galiteva was reappointed in March 2020 for a third term that expires December 2022. Ms. Galiteva was elected Board Chair effective October 2, 2020. Ms. Galiteva is currently President for NEOptions, Inc., a renewable energy and new technology product design and project development firm. Her industry experience includes serving as Executive Director of the Los Angeles Department of Water and Power and head of its Green LA, Environmental Affairs and New Product Development Organization. While at the municipal utility, she was responsible for strategic positioning and the environmental compliance departments. Her career includes working with the ISO and California Power Exchange on their initial launches, and working as a power analyst for the New York Power Authority. Ms. Galiteva graduated from Pace University School of Law with a Juris Doctor degree in 1993 and a LL.M. degree in 1994 in Environmental and Energy Law. She specialized in electric utility strategic policy analysis and decision making focusing on pending industry transition and deregulation issues.

Ashutosh Bhagwat was reappointed in March 2020 for a third term ending December 2022. Mr. Bhagwat was elected Board Vice-Chair effective October 2, 2020. Mr. Bhagwat is Professor of law at the University of California at Davis School of Law. From 1994 to 2011, he served as Professor of law at the University of California, Hastings College of Law in San Francisco. He has taught courses in antitrust, regulated industries, administrative and constitutional law. From 1992 to 1994, he was an associate at the law firm of Sidley & Austin. He also served as a law clerk to U.S. Supreme Court Justice Anthony Kennedy (1991-1992) and Judge Richard Posner of the U.S. Court of Appeals, Seventh Circuit (1990-1991). Mr. Bhagwat received his undergraduate degree from Yale University, graduating summa cum laude with Honors in History in 1986. He was awarded a Juris Doctor with Honors degree in 1990 from the University of Chicago Law School, where he was the Articles Editor of the University of Chicago Law Review.

Severin Borenstein was appointed to the Board in January 2019 for a term ending December 2021. Mr. Borenstein is E.T. Grether Professor of Business Administration and Public Policy at the Haas School of Business, and Faculty Director of the Energy Institute at Haas, at University of California Berkeley. He is also director emeritus of the University of California Energy Institute. His research focuses on business competition, strategy, and regulation, and he has published extensively on the electricity markets. Mr. Borenstein is also a research associate at the National Bureau of Economic Research in Cambridge, MA. His current research projects include the economics of renewable energy, economic policies for reducing greenhouse gases, and alternative models of retail electricity pricing. Mr. Borenstein received his undergraduate degree from UC Berkeley and a Ph.D. in Economics from M.I.T.

Mary Leslie was appointed to the Board in January 2019 for a term ending December 2020 (Ms. Leslie may continue on the Board for 60 days after her term expires while the Board selection process is completed). Ms. Leslie has served as president of Los Angeles Business Council since 2001, growing the council into a prominent organization that works with business, government, and non-profit organizations to enact policies and programs that strengthen Los Angeles' economy and quality of life. She also currently serves on the LA Sustainability Leadership Council, UCLA Advisory Committee for the Luskin Center for Innovation, LA Cleantech Incubator, and is a member of the Pacific Council of International Policy. Ms. Leslie was deputy mayor for the City of Los Angeles under Mayor Richard Riordan and a Los Angeles Department of Water and Power Commissioner under Mayor James Hahn. She was previously deputy director of the U.S. Small Business Administration and executive director of the California Economic Development Commission. Ms. Leslie earned a bachelor's degree from University of Santa Clara, and a master's degree in Public Administration from the University of Southern California. She also attended the Executive Management Program at the UCLA Anderson School of Management.

Management and Employees. As of November 30, 2020, ISO had 641 full-time employees who are organized into ten divisions: Chief Executive Office, Chief Operating Officer, Infrastructure and Operations Planning, Power Systems and Market Technology, Operations, Market Policy and Performance, Finance, Human Resources, General Counsel, and External and Customer Affairs. ISO employees are not represented by any unions or other collective bargaining units.

Elliot Mainzer is the President and Chief Executive Officer. Mr. Mainzer is committed to using leading-edge policies and new technologies to accelerate California's drive towards the reliable decarbonization of its electric power grid. He started in his new role at the ISO on September 30, 2020 following a successful 18-year career at the Bonneville Power Administration (BPA) where he was at the forefront of transformational changes in the western electricity market. While serving as BPA's administrator and CEO from 2013-2020, Mr. Mainzer effectively navigated the agency through a period of tremendous industry change and economic headwinds by improving the agency's long-term cost competitiveness and financial resiliency, modernizing assets and system operations, and positioning BPA as a more responsive and agile business partner. In recent years, Mr. Mainzer has co-chaired the Western Electric Industry Leaders Group to support greater western market and policy coordination on such topics as resource adequacy, transmission development, and carbon accounting. He has also served as the Chair of the U.S. Entity for the Columbia River Treaty with Canada and on the boards of the Electric Power Research Institute, and the Utility Wind Integration Group. A native of San Francisco, Mr.

Mainzer has an undergraduate degree in geography from UC Berkeley, and master's degrees in Business Administration and Environmental Studies from Yale University.

Khaled Abdul-Rahman is Vice President, Power System and Market Technology and oversees the integration of power system and market technology systems to implement policy initiatives and support operational needs under large penetration of renewable resources and other smart grid technology. Dr. Abdul-Rahman previously served as the ISO's Executive Director of Power Systems and Smart Grid Technology Development where he managed the market software development for the ISO's Market Redesign and Technology Upgrade (MRTU). He also managed and provided technical oversight for all issues related to the Western Energy Imbalance Market (EIM) implementations, and the RC West's look-ahead contingency analysis tools. As the director of Power Systems Technology, Dr. Abdul-Rahman developed solutions to mitigate the impact of variable renewable energy resources on grid and market operation and price volatility. Prior to joining the ISO in 2009 as a Principal in the Technology Department, Dr. Abdul-Rahman had a rich career history. He gained extensive national and international power system and electricity market experience having worked for Siemens, Energy Consulting Company International, Illinois Power Company, Open Access Technology International, and Oracle Corporation. Dr. Abdul-Rahman earned a Ph.D. in Electrical Engineering from the Illinois Institute of Technology, Chicago, IL, and a Master's of Science of Electrical Engineering and a Bachelor's of Science of Electrical and Computer Engineering from Kuwait University in Kuwait.

Roger Collanton currently serves as the Vice President, General Counsel and Chief Compliance Officer and Corporate Secretary. Mr. Collanton oversees the legal, corporate compliance, governance and internal audit functions. Mr. Collanton also advises the Board of Governors on the application of federal, state and local law and provides guidance and advice on governance and corporate issues. Mr. Collanton joined the ISO in 2009 and, prior to his current role, served as Assistant General Counsel and Deputy General Counsel. Before joining the ISO, Mr. Collanton was a partner in the law firm of Morrison & Forester, LLP, in San Francisco where he represented clients in energy litigation matters, constitutional litigation, consumer class action defense, and various other business litigation matters. Mr. Collanton is a member of the California Bar and has appeared in state and federal courts throughout California and the United States. He received a law degree from the University of California, Berkeley School of Law in 1995. Mr. Collanton received his Bachelor of Science in Business Administration from San Francisco State University in 1986. He became a Certified Public Accountant in 1987. Prior to law school, Mr. Collanton practiced as a certified public accountant with Price Waterhouse and was a corporate controller for a privately-held company.

Stacey Crowley currently serves as the Vice President, External and Customer Affairs. Ms. Crowley oversees all aspects of customer support, communication, government relations and external policy activities. Ms. Crowley previously served as the Director of Regional Affairs. Prior to joining the ISO she was the Director of the Nevada State Office of Energy and advisor to Nevada governor Brian Sandoval. There, she helped define important energy opportunities and challenges in the state. Ms. Crowley managed Nevada's federal grant programs and economic incentive regulations for clean energy projects. In that role she served as Chair of the Western Interstate Energy Board and served on the board of the National Association of State Energy Officials. Ms. Crowley has a Bachelor of Science degree in Architecture from the University of Michigan and a Master's of Architecture from the University of New Mexico.

Neil Millar is Vice President, Transmission Planning and Infrastructure Development and leads the division responsible for its transmission planning, infrastructure contracts, and generation interconnection processes. Mr. Millar previously served as the Director of Transmission Planning. Prior to joining the ISO in November of 2010, he was with Alberta's Utilities Consumer Advocate, the Alberta Electric System Operator, and TransAlta Utilities, then a vertically-integrated utility. Mr. Millar earned his engineering degree at the University of Saskatchewan and is a professional engineer registered in Alberta, Canada.

Mark Rothleder is Senior Vice President and Chief Operating Officer and is leading a multi-divisional management team that integrates market policy, planning, operations, technology and program management. Mr. Rothleder has held several critical positions at the ISO after joining as one of its first employees in 1997. He is now the longest serving ISO employee. Before being named Chief Operating Officer, he served as Vice President, Market Quality and Renewable Integration, Director of Market Analysis and Development, Principal Market Developer, and Director of Market Operations. In an effort that culminated in spring 2009, Mr. Rothleder led a multifunctional team in designing and implementing market rules and software modifications related to the ISO New Market. Since joining the ISO over twenty-three years ago, Mr. Rothleder has worked extensively on implementing and integrating the approved market rules for California's competitive wholesale energy and reserves markets. Mr. Rothleder is a registered Professional Electrical Engineer in the state of California and holds a B.S. degree in Electrical Engineering from the California State University, Sacramento. He has taken post-graduate coursework in Power System Engineering from Santa Clara University and earned an M.S. in Information Systems from the University of Phoenix. Prior to joining the ISO, Mr. Rothleder worked for eight years in the electric transmission department of Pacific Gas and Electric Company, where his responsibilities included operations engineering, transmission planning, and substation design.

Ryan Seghesio is Vice President, Chief Financial Officer and Treasurer. He joined the ISO in March 2010 and has over 25 years of experience in finance. Mr. Seghesio oversees the financial functions of the ISO including: Treasury and Credit, Accounting, and Financial Planning and Analysis. Prior to joining the ISO, Mr. Seghesio served in a number of senior roles at Oracle Corporation, most recently as the Assistant Treasurer where he oversaw global cash and investment management, foreign exchange, and global bank relationships. Previously, he held positions at the City of Sacramento Treasurer's Office and Dean Witter Reynolds. Mr. Seghesio is a Certified Treasury Professional (CTP) and holds a Bachelor of Science degree in Finance and a Master of Business Administration degree from the California State University, Sacramento.

Jodi Ziemathis is Vice President, Human Resources and leads the development and implementation of the ISO's people strategies. Since joining the ISO in 2006, Ms. Ziemathis has held several leadership assignments in the human resources area, and has helped the organization build an intentional culture, strengthen leadership capabilities and drive high levels of employee engagement. Ms. Ziemathis has more than two decades of human resources experience within the electric industry, with proven success driving high-quality people strategies and initiatives. Prior to joining the ISO, she was a Director of Human Resources with Calpine Corporation where she provided leadership on corporate recruiting and general human resources for a regional office.

She is a graduate of San Jose State University and holds the Senior Professional in Human Resources (SPHR) certification.

California Energy Crisis and Related Litigation

In 2000 and 2001, the California energy markets, including those operated by the ISO, experienced high prices, shortages of energy and reserves, rolling blackouts and liquidity problems for many market participants. Some market participants, including the California Power Exchange (Cal PX), filed for bankruptcy. Purchasers of energy during this period sought refunds in proceedings at the Federal Energy Regulatory Commission. In a proceeding that is still ongoing, the Federal Energy Regulatory Commission issued a series of orders related to mitigating the clearing prices in markets administered by the ISO and the Cal PX for the period from October 2, 2000 through June 20, 2001. Most of the ISO's market participants have settled their liability arising from this case and related proceedings. The ISO believes that the ultimate outcome of the proceeding will have no material financial impact as these refund amounts have been funded already and will ultimately be resettled among market participants only and not the ISO, except for the Generator Noncompliance Fines described below.

Generator Noncompliance Fines

In 2000 and 2001, the ISO billed fines to its market participants that failed to comply with dispatch instructions, of which the ISO collected \$60.7 million as revenue. Generally, these fines were assessed at a rate corresponding to twice the highest price paid in the markets for energy during the interval when the generator failed to comply the dispatch instruction. Because the energy prices for this period are being adjusted as a result of the refund proceedings at the Federal Energy Regulatory Commission, described above, the amount of the fines to be retained by the ISO is being reduced, with any surplus collections to be refunded with interest to market participants. As of December 31, 2019, the ISO currently estimates its remaining refund liability (including interest) related to generator noncompliance fines to be \$1.4 million, and has reserved this amount to pay refunds. This estimate could change further as the proceedings move toward their conclusion.

Legislation and Regulations

From time to time energy-related legislation is proposed or enacted by the state of California legislature or the U.S. Congress, and regulations or orders are promulgated by FERC or the CPUC that may affect the ISO, its operations or its revenues or its market participants. The ISO actively monitors all such legislative and regulatory developments.

Bankruptcy of Pacific Gas & Electric, Corp.

On January 29, 2019, Pacific Gas & Electric, Corp. ("PG&E"), one of the ISO's largest customers, filed for bankruptcy reorganization along with its parent company, Pacific Gas & Electric, Inc. With respect to the ISO, PG&E continued business operations as normal and paid all market invoices in full and on time. The bankruptcy court confirmed PG&E's plan of reorganization on June 20, 2020, and PG&E emerged from bankruptcy on July 1, 2020.

2020 Rotating Electricity Outages

On August 14 and 15, 2020, during a West-wide heat storm, the ISO initiated rotating outages that affected approximately 492,000 customers in California for a duration of 15 minutes to 150 minutes. The ISO directed these outages to ensure the reliable operation of the grid in light of a shortage of operating reserves, avoid a risk of cascading outages, and to comply with federal mandatory reliability standards. The ISO believes it complied with all applicable laws and regulations, and has not received claims from any affected customers. If any such claims were to be made, the ISO believes that it would not be liable to the affected customers. In response to a request from the Governor of California, the ISO together with the California Public Utilities Commission and the California Energy Commission jointly prepared a preliminary root cause analysis of the events. The October 6, 2020 report is available here [<http://www.caiso.com/Documents/Preliminary-Root-Cause-Analysis-Rotating-Outages-August-2020.pdf>]. The final root cause analysis was released on January 13, 2021 and is available here [<http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>].

Risk Factors

ISO Charges and GMC. The ISO's ability to meet its obligation to pay debt service under the 2021 Loan Agreement is dependent on the collection of charges imposed by the ISO under its Tariff (primarily the GMC) for various services provided by the ISO to market participants. The GMC rates are designed to provide recovery of operating expenses and debt service, including principal of and interest on the 2021 Bonds.

The ISO's largest customers are responsible for a significant portion of total revenues. For the years ended December 31, 2019, 2018 and 2017, revenue collections were allocated among such customers as follows:

	2019	2018	2017
2 largest market participants	38%	43%	47%
10 largest market participants	61%	65%	69%
25 largest market participants	77%	80%	83%

Nonpayment of charges by multiple large market participants could result in a shortfall of the GMC revenue requirement. However, the ISO's priority claim on any Market-Related Receipts with the associated coverage that such revenues have historically provided serves to mitigate, to a degree, the risk that non-payment of GMC obligations by one or more market participants would result in a shortfall of GMC collections by the ISO.

The ISO has from time to time been involved in disputes with market participants about market transactions. Some of these disputes involve the application of GMC to the market participants. These disputes are pursued in the managed dispute processes and in proceedings before FERC. While there are no disputes pending that could have an adverse impact on the ISO, no assurance can be given regarding any future disputes or the effect of any such disputes on the ISO's operations or revenues.

COVID-19. On March 4, 2020 the Governor of California declared a state of emergency as a result of the threat of COVID-19. In addition, President Trump declared a national emergency on March 13, 2020 as a result of the pandemic. Subsequently, on March 19, 2020 the Governor of California issued a stay at home order to protect the health and well-being of all Californians and to establish consistency across the state in an effort to slow the spread of COVID-19. The order has an exception for workers in federal critical infrastructure sectors, which include the energy sector generally and the ISO specifically. The State of California and local government, in collaboration with the Federal government, continue sustained efforts to minimize the spread and mitigate the effects of COVID-19. The situation continues to evolve.

In response to this crisis, the ISO has taken proactive steps to protect the health and safety of its staff, while safeguarding the critical infrastructure of the power grid and energy market. COVID-19 did not impact the ISO's operations or its financial results, but did have an impact on electricity demand in 2020. The ISO has the ability to respond to declining volumes by raising its grid management charge rates to ensure a full recovery of costs (See "Grid Management Charge, Development of the GMC Rates and Rate Structure."). In June 2020, GMC rates were increased to respond to declining volumes the ISO had observed through April. Those rate increases were later reduced in October 2020 after the effects of a hot summer caused volumes to increase. The full extent to which the COVID-19 impacts the ISO and results of operations going forward will depend on future developments, which are uncertain and cannot be predicted at this time.

Post-Employment Benefits. The ISO sponsors defined-contribution retirement plans for its employees. The ISO does not offer and has not offered defined-benefit pensions, with the limited exception of the ISO Retirees Medical Plan (the "Plan"), which provides post-employment health care benefits to employees who retire from the ISO and meet certain eligibility requirements. See "Retirement Benefits and Other Post-Employment Benefits (OPEB)." As of January 1, 2019, the Plan was closed to new hires and rehires. The ISO currently makes an annual contribution to a tax-exempt voluntary employees' beneficiary association trust for the Plan in an amount equal to the actuarially determined liability attributable to those eligible to receive benefits. These annual costs could increase materially if the costs of medical care increase by amounts greater than those reflected in the actuarial projections, if the investments in the trust do not perform as well as reflected in the actuarial assumptions, or if more employees than in past years become eligible for benefits.

Contractual Risks and Withdrawal. The TCA details the rights and obligations of PTOs, including their obligations to transfer to the ISO operational control of their transmission assets, to maintain those transmission assets and to comply with policies and directives of the ISO. As discussed further below, for a PTO to withdraw from the ISO it would have to satisfy certain contractual requirements set forth in the TCA and obtain regulatory approvals. If any one of California's three major investor-owned electric utilities, PG&E, SCE, or SDG&E, were to withdraw from the ISO, the impact would likely be material to the ISO.

If one of California's three major investor-owned electric utilities were to seek to withdraw from the ISO, under the TCA, it would have to give the ISO two years' advance notice before withdrawing and obtain any "necessary regulatory approval." Approval from FERC would be necessary. Under the currently applicable legal standard, however, the ISO does not believe this would pose a significant barrier to withdrawal, although an investor-owned utility could face

significant challenges in developing and implementing adequate replacement arrangements for ISO membership. Whether CPUC approval would also be necessary for withdrawal is legally unsettled in California, but the CPUC has taken the position that its approval would be required before any of the three major investor-owned utilities could leave the ISO.

The ISO has no reason to believe that any of these three entities is planning to withdraw from the ISO. They receive significant benefits from their participation in the ISO that they could not obtain otherwise. These benefits include coordinated transmission operation and planning, optimized dispatch (which reduces the cost of serving the utilities' own customers), the opportunity to easily sell excess generation capacity, and an improved ability to integrate renewable resources. These all facilitate the ability of the investor-owned utilities to satisfy requirements of both federal and state law. In addition, PTOs participating in the ISO are currently eligible to receive an increased rate of return on their transmission assets of one-half a percent on the equity component of their transmission rate base. FERC policy provides this increase as an incentive for transmission-owning utilities to belong to an independent system operator, such as the ISO, or a comparable organization known as a regional transmission organization. Assuming this policy remains in effect, California's major investor-owned utilities, as ISO PTOs, will continue to realize a significant financial benefit as a result of this incentive. For example, SDG&E's most recent transmission rate filing shows a benefit associated with this incentive of approximately \$17.5 million annually. PG&E and SCE are parties to transmission rate settlements filed at FERC containing fixed negotiated returns on equity that do not separately reflect an ISO participation incentive and associated benefits, but both of these utilities have rate bases substantially larger than SDG&E's (approximately 95 and 50 percent greater for PG&E and SCE respectively, based on recent filings).

To obtain comparable benefits without being a PTO with the ISO, a utility would need to belong to another organized market, such as that administered by another independent system operator or regional transmission operator, together with other utilities that are linked through significant transmission capacity (in order to facilitate transactions). No such opportunities currently exist for California's major investor-owned utilities. The closest alternative is the organized market administered by the Southwest Power Pool. However, this market does not have any participants from California or any of its neighboring states, and none of its participants controls significant transmission links directly to California. Moreover, the opportunity for this alternative market to expand west in the future is somewhat restricted by the fact that approximately 80 percent of the load in the Western interconnection either participates in the ISO's market or has committed to join it.

However, no assurance can be given that the withdrawal of one of California's three investor-owned utilities would not occur, which would likely adversely affect the ISO's ability to operate effectively as a system operator and the ISO's ability to meet its 2021 Bond obligations.

Dependence on Key Personnel. The ISO is managed by a small group of key executive officers and other management personnel whose loss could have a material adverse effect on the ISO. In addition, the success of the ISO will depend in large part on its ability to attract and retain highly skilled and qualified operations, technical and other personnel. The ISO is committed to be an "Employer of Choice" by offering a variety of incentives including training, benefits and career development opportunities to attract and retain talent.

Credit Rating. The credit ratings of the ISO and of the 2021 Bonds could be dependent in part on the credit ratings of the ISO's major market participants that pay the GMC. A substantial downgrade in the credit rating of such customers, particularly the ISO's largest customers representing a material portion of the load participation in the ISO, may have a material adverse effect on the credit rating of the ISO, which in turn could materially and adversely affect the ISO's business and financial condition and the market value of the 2021 Bonds. The ISO maintains appropriate customer credit standards in order to protect the GMC revenue stream security and, ultimately, the ISO's ability to make full and timely payments in respect of the 2021 Bonds. Customers that do not meet ISO Unsecured Credit Limit standards are required to post collateral to cover their net ISO obligations.

Access to Capital. As a nonprofit entity, the ISO is financed entirely by debt and retained Net Operating Revenues. The ISO does not raise equity capital through the issuance of stock or cash contributions from members. In order to assure sufficient resources, the ISO must use available cash on hand, collect capital funding through its GMC revenue requirement or access debt capital from outside sources on acceptable terms. The ISO can give no assurances that its current and future capital structure, operating performance or financial condition will permit it to access the capital markets or obtain other debt capital at the times, in the amounts and on the terms necessary for the ISO to carry out its business plan successfully. Upon the issuance of the 2021 Bonds, the ISO will have no other debt outstanding.

FERC Approval Process. The ISO's rates, service offerings, and terms and conditions of service are specified in the Tariff. The ISO periodically determines that changes to the Tariff are necessary to respond to its needs as well as the needs of market participants. Such Tariff amendments require FERC authorization and are subject to a regulatory process that may result in outcomes that are not favorable to the ISO.

Other Regulatory Risk. While the ISO's rates and charges are not subject to review or approval by state agencies or regulatory bodies, its governance could be affected by California legislation. Moreover, various undertakings by PTOs are subject to regulations by the CPUC, the California Energy Commission, or other state agencies. No assurance can be given that a future adverse regulatory action applicable to PTOs will not have an adverse effect on the ISO's operations or revenues.

Risks Associated with the Operation of Transmission Assets. The ISO is required to operate the transmission system in accordance with standards promulgated by the NERC, the nation's designated Electric Reliability Organization. Noncompliance with such standards may subject the ISO to monetary penalties in amounts ranging up to \$1 million per violation per day. FERC has not granted independent system operators blanket authority to recover from their market participants' monetary penalties assessed by NERC. However, FERC has stated that it will consider filings submitted by independent system operators pursuant to Section 205 of the FPA requesting authority to recover such monetary penalties. At this time, the ISO has not submitted such a filing. If the ISO were to submit a filing requesting authority to recover assessed monetary penalties, and if FERC were to rule that the penalties should be recovered through the GMC rather than assigned to the entities responsible for causing the penalties, this could result in GMC rates that are viewed by market participants as excessive.

The transmission assets under the ISO's control are subject to damage from fires, seismic activity and to outages from similar unforeseen events. They are also subject to capacity limitations, security breaches, computer viruses, sabotage, break-ins, or operational error. Any of these occurrences may cause system failures, interruptions in service or reduced capacity. The ISO could incur liability related to these events if found grossly negligent.

California relies on energy imports from out-of-state entities to meet electricity demand at various times during the year, particularly the summer. Such entities may not have spare capacity or may be unwilling to provide such capacity to California. Each load-serving entity using the ISO Balancing Area is responsible for ensuring that it has arranged sufficient energy to meet its customer demand ahead of the operating day. In the event actual demand exceeds expectations, the ISO will attempt to procure available supply to meet such additional actual demand. At times, system-wide or local shortages can require the ISO-directed curtailment of energy use (load shedding) to ensure transmission system stability. The ISO directed load shedding in August 2020 (discussed above) and at other times in the past when system conditions indicated it was necessary to ensure reliability, but has never incurred any liability with these events.

Information Technology and Cybersecurity. The ISO uses information technology systems to interact with market participants, administer its markets and operate the transmission system, as well as for other business purposes. The ISO relies on the capacity, reliability and security of the hardware and software infrastructure of these systems and the ability to expand and update this infrastructure in response to changing needs. The ISO is constantly updating our information technology infrastructure. Any failure to manage, expand and update our information technology infrastructure or any failure in the operation of this infrastructure could harm the ISO's operations.

Despite the ISO's implementation of security measures, our systems are vulnerable to damages from cyber-attacks, computer viruses, natural disasters, unauthorized access and other similar disruptions. Any system failure, successful cyber-attack, accident or security breach could result in disruptions to the ISO's ability to operate and to collect GMC. To the extent that any disruptions or security breach results in a loss or damage to data, inappropriate disclosure of confidential information, or negative publicity, it could harm the ISO's business. In addition, the ISO could be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Bankruptcy. In addition to the limitation on remedies contained in the 2021 Indenture and the 2021 Loan Agreement, the rights and remedies provided in the 2021 Indenture and the 2021 Loan Agreement may be limited by and are subject to the provisions of federal bankruptcy laws and to other laws or equitable principles that may affect the enforcement of creditors' rights. In the event the ISO were to become a debtor under the Bankruptcy Code, the ISO would be entitled to all of the benefits and protective provisions of the Bankruptcy Code as applicable, and there could be adverse effects on the holders of the 2021 Bonds that could result in delays or reductions in payments on, or other losses with respect to, the 2021 Bonds.

The parties (including the Trustee, the Authority, and the Owners) may be prohibited from taking any action to collect any amount from the ISO or to enforce any obligation of the ISO,

unless the permission of the bankruptcy court is obtained. These restrictions may also prevent the Trustee from making payments to the Owners from funds in the possession of the Trustee.

The covenant of the ISO that it will not file with the Federal Energy Regulatory Commission under Section 205 of the Federal Power Act any amendment to the Tariff that has the effect of: (a) eliminating the rule, currently in Appendix F, part C of the Tariff, that the ISO's Grid Management Charge revenue requirement includes a "debt service coverage requirement" of not less than 25%, (b) eliminating the requirement that the ISO maintain a "CAISO Operating Cost Reserve" of 15% of its annual Operating Costs, as currently in Appendix A (the definition of CAISO Operating Cost Reserve") and Appendix F (including the "CAISO Operating Cost Reserve" adjustment in the Grid Management Charge revenue requirement) of the Tariff, or (c) eliminating the rule, currently in Sections 11.29.13.7 and 11.29.17.1 of the Tariff, that the ISO has a priority claim to recover Grid Management Charge from any market revenue received, before payments are made to market participants, may no longer be enforceable.

Payments previously made to the Owners of the 2021 Bonds during the 90 days (or possibly one year) immediately preceding the filing of the bankruptcy petition may be avoided as preferential payments, so that the Owners would be required to return such payments to the ISO.

The ISO may be able to borrow additional money while it is in bankruptcy, which loan could have priority over the 2021 Bonds. The ISO may be able, without the consent and over the objection of the Trustee, the Authority, or the Owners of the 2021 Bonds, to alter the priority, interest rate, principal amount, payment terms, maturity dates, payment sources, covenants, and other terms or provisions of the 2021 Bonds, 2021 Indenture or the 2021 Loan Agreement, as long as the bankruptcy court determines that the alterations are fair and equitable.

There may be delays in payments on the 2021 Bonds while the court considers any of these issues. There may be other possible effects of a bankruptcy of the ISO that could result in delays or reductions in payments on the 2021 Bonds, or result in losses to the Owners of the 2021 Bonds. Regardless of any specific adverse determinations in a Corporation bankruptcy proceeding, the fact of a Corporation bankruptcy proceeding could have an adverse effect on the liquidity and value of the 2021 Bonds.

APPENDIX B

AUDITED FINANCIAL STATEMENTS OF THE CORPORATION

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California Independent System Operator Corporation

Financial Statements

December 31, 2019 and 2018



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December 31, 2019 and 2018

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Report of Independent Auditors

To the Board of Governors and Management of the California Independent System Operator Corporation:

We have audited the accompanying financial statements of the California Independent System Operator Corporation, which comprise the statements of net position as of December 31, 2019 and 2018, and the related statements of revenues, expenses and changes in net position and of cash flows for the years then ended.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the California Independent System Operator Corporation as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.



Other Matter

Required Supplementary Information

The accompanying management's discussion and analysis on pages 3 through 12 is required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in the appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

PricewaterhouseCoopers LLP

May 21, 2020

California Independent System Operator Corporation

Management's Discussion and Analysis (Unaudited)

December 31, 2019 and 2018

The following discussion and analysis of the California Independent System Operator Corporation (the "Company") provides an overview of the Company's financial activities for the years ended December 31, 2019 and 2018. This discussion and analysis should be read in conjunction with the Company's financial statements and accompanying notes, which follow this section.

Background

The Company, a non-profit public benefit corporation, is responsible for ensuring the reliable and efficient use of the transmission grid in most of California and a part of Nevada. The Company operates this grid, which is one of the largest and most modern power grids in the world, as a balancing authority within the Western Electricity Coordinating Council. The Company conducts comprehensive planning for the future development of this grid.

In addition, the Company administers a competitive energy market that matches supply with demand, procures operating reserves and allocates space on transmission lines for delivering electricity efficiently, all of which ultimately benefits consumers. This market provides open and nondiscriminatory access to the transmission grid more than 200 market participants. The Company also administers the Western Energy Imbalance Market. This extension of the Company's real-time energy market facilitates transactions with and among several balancing authority areas in the western interconnection that are not a part of the grid the Company operates.

The Company's markets and its grid operations are regulated by the Federal Energy Regulatory Commission, and comply with standards set by the North American Electric Reliability Corporation and the Western Electricity Coordinating Council. A five-member Board of Governors (the "Board") appointed by the Governor of California and confirmed by the California State Senate governs the Company.

Financial Reporting

The Company's accounting records are maintained in accordance with generally accepted accounting principles for proprietary funds as prescribed by the Governmental Accounting Standards Board (GASB) and where not in conflict with GASB pronouncements, accounting principles prescribed by the Financial Accounting Standards Board ("FASB").

Cash held by the Company on behalf of market participants is recorded in a restricted asset account with a corresponding liability due to market participants in the Statements of Net Position. Except for the retention of restricted assets noted above, the financial statements reflect a net reporting of market activities wherein the financial statements do not include the revenues and expenses, cash flows, or assets and liabilities associated with the market transactions the Company facilitates.

Revenue

The Company charges a Grid Management Charge ("GMC") to market participants to recover the Company's operating costs, capital expenditures, debt service costs, and to provide for an operating reserve. The GMC is comprised of the following three service categories: market services, system operations and congestion revenue rights services.

The Company receives other revenues outside of its GMC charges including, but not limited to: fees paid for participation in the Western Energy Imbalance Market ("EIM"), Reliability Coordinator services, generator interconnection studies, and for operation of the California-Oregon Intertie Path.

California Independent System Operator Corporation

Management's Discussion and Analysis (Unaudited)

December 31, 2019 and 2018

After accounting for other revenues, the Company establishes its annual net revenue requirement which is allocated to the three GMC service categories based on percentages established in the tariff. Category costs are then divided by forecasted volumes to establish the annual rates.

Liquidity

The Company's tariff allows for the GMC rates to be adjusted during the year to ensure collection of the revenue requirement. During the year, if forecasted revenues from any of the three GMC service categories is materially different, as defined in the tariff, from budgeted revenues, the Company may adjust the rate for the affected category to realign the forecast revenue with the budgeted revenue.

Per the tariff, the revenue requirement includes an operating reserve, which is 15% of the current year's operating and maintenance budget, and a debt service reserve, which is 25% of the debt service to be paid during the year. The Company's operating and debt service reserves were fully funded in 2019 and 2018. Furthermore, the Company maintains capital reserves in its unrestricted funds which consist of funds collected through the revenue requirement for future capital expenditures.

The Market and Reliability Coordinator Service

The Company's wholesale energy market is the vehicle for providing open-access transmission service to users of the transmission grid. It includes a day-ahead market for all twenty-four hours of the next operating day, and a real-time market that schedules resources in 15 minute intervals and dispatches them in 5 minute intervals. The day-ahead market clears supply and demand offers for short-term energy purchases and sales. The real-time market clears supply offers and the Company's forecast of demand. Together, these enable the economic scheduling and dispatch of generating resources to maintain continuous balance of supply and demand and management of congestion on the grid. The market also procures reserve capacity or ancillary services to maintain reliable operation under unexpected changes in grid conditions. In addition, the Company performs a settlement and clearing function by charging and collecting payments from users of these services and paying providers of such services.

The Company continues to develop market enhancements to increase reliability, efficiency and the accuracy of market results. The current market prices energy at the points it enters and leaves the grid, which increases transparency by sending signals for competitive investments in transmission and generation. The market operates on an advanced and flexible platform helping to integrate renewable resources as well as demand response. These enhancements increase the functionality and flexibility of the market system to meet the on-going needs of market participants.

The Company also operates the Western Energy Imbalance Market (the "EIM"). This extension of the Company's real-time energy market facilitates transactions with and among several balancing authority areas in the western interconnection that are not a part of the grid the Company operates. The EIM provides reliability, efficiency and renewable integration benefits to the West while also providing economic benefits to participants. The broader footprint for the real-time market provides more opportunities to integrate cleaner sources of energy, such as wind and solar, that may be produced in one area but needed in another. Eight balancing authorities are participating as of the end of 2019 and several others have committed to participate in the future.

California Independent System Operator Corporation

Management's Discussion and Analysis (Unaudited)

December 31, 2019 and 2018

In 2018, the Company announced its intent to offer Reliability Coordinator services for its balancing area and other interested parties in the Western interconnection. The Company filed with, and received approval from FERC for the rate design, terms and conditions for these services which began in July 2019. A Reliability Coordinator has the highest level of authority and responsibility for the reliable operation of the power grid, and has a wide-area view of the bulk electricity system. It is required to comply with federal and regional grid standards, and can authorize measures to prevent or mitigate system emergencies in day-ahead or real-time operations. As of December 2019, the Company had finalized agreements with 42 electrical balancing authorities and their transmission operators throughout the West to provide Reliability Coordinator services.

Financial Highlights

Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position

The financial statements provide both short-term and long-term information about the Company's financial status. The *Statements of Net Position* include all of the Company's assets and liabilities, using the accrual method of accounting, and identify any assets which are restricted as a result of bond covenants or external commitments. These Statements *also* provide information about the nature and amount of resources and obligations at specific points in time.

The *Statements of Revenues, Expenses and Changes in Net Position* report all of the Company's revenues and expenses during the year.

The Statements of *Cash Flows* report the cash provided and used during the year by operating activities, as well as other cash sources such as investment income and debt financing, and other cash used such as payments for bond principal and capital additions.

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Condensed Statements of Net Position (in millions)

	2019	2018	2017
Assets and deferred outflows			
Current assets	\$ 470.6	\$ 423.6	\$ 403.9
Fixed assets, net	170.9	167.1	178.9
Other noncurrent assets	200.1	164.6	149.0
Deferred outflows	7.1	7.7	8.9
Total assets and deferred outflows	<u>\$ 848.7</u>	<u>\$ 763.0</u>	<u>\$ 740.7</u>
Liabilities and net position			
Current liabilities	\$ 473.3	\$ 398.9	\$ 380.2
Long-term debt, net of current portion	170.0	175.8	181.4
Other noncurrent liabilities	10.7	19.1	17.2
Deferred inflows	8.2	2.9	-
Net position	186.5	166.3	161.9
Total liabilities, deferred inflows and net position	<u>\$ 848.7</u>	<u>\$ 763.0</u>	<u>\$ 740.7</u>

Assets

Current Assets (in millions)

	2019	2018	2017
Cash and cash equivalents	\$ 366.4	\$ 324.9	\$ 332.8
Short-term investments	72.5	69.9	49.0
Accounts receivable and other assets	31.7	28.8	22.1
Total current assets	<u>\$ 470.6</u>	<u>\$ 423.6</u>	<u>\$ 403.9</u>

2019 Compared to 2018

As of December 31, 2019, current assets increased by \$47.0 million during the year. This net increase is largely due to increases in collateral funds and other market accounts held for market participants, and to higher accounts receivable as a result of higher generator interconnection project studies activity.

2018 Compared to 2017

As of December 31, 2018, current assets increased by \$19.7 million during the year. This net increase is largely due to increases in collateral funds and other market accounts held for market participants, and to higher accounts receivable.

Fixed Assets, Net (in millions)

	2019	2018	2017
Net assets in service	\$ 163.9	\$ 150.2	\$ 162.6
Work-in-progress	6.9	16.9	16.3
Total fixed assets, net	<u>\$ 170.8</u>	<u>\$ 167.1</u>	<u>\$ 178.9</u>

2019 Compared to 2018

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Total fixed assets, net of accumulated depreciation, increased in 2019 by \$3.7 million compared to 2018. The increase is primarily due to higher net assets in service of \$13.7 million, as a result of new assets placed-in-service of \$40.3 million, partially offset by the current year depreciation expense of \$26.6 million. Work in-progress decreased by \$10.0 million compared to 2018 due to the completion of capital projects during the year.

2018 Compared to 2017

Total fixed assets, net of accumulated depreciation, decreased in 2018 by \$11.8 million compared to 2017. The decrease is primarily due to lower net assets in service of \$12.4 million, as a result of the current year depreciation expense of \$35.3 million, partially offset by new assets placed-in-service of \$22.9 million. Work in-progress increased slightly by \$0.6 million compared to 2017 due to the ongoing work to new capital projects during the year.

Other Noncurrent Assets (in millions)

	2019	2018	2017
Long-term investments	\$ 193.2	\$ 159.0	\$ 143.3
Other assets	7.0	5.6	5.7
Total other noncurrent assets	<u>\$ 200.2</u>	<u>\$ 164.6</u>	<u>\$ 149.0</u>

2019 Compared to 2018

Other noncurrent assets increased by \$35.6 million in 2019. This change is largely attributable to increased long-term investments amounting to \$34.2 million during the year due to higher corporate reserves and continued investing in fixed income mutual funds which are considered to be long-term assets.

2018 Compared to 2017

Other noncurrent assets increased by \$15.6 million in 2018. This change is largely attributable to increased long-term investments amounting to \$15.7 million during the year due to higher corporate reserves and a shift to investing in fixed income mutual funds which are considered to be long-term assets.

Deferred Outflows (in millions)

	2019	2018	2017
Unamortized other post employment benefit costs	\$ -	\$ -	\$ 0.5
Unamortized loss on refunding of bonds	7.1	7.7	8.4
Total deferred outflows	<u>\$ 7.1</u>	<u>\$ 7.7</u>	<u>\$ 8.9</u>

2019 Compared to 2018

The decrease in the deferred outflows balance of \$0.6 million is due to the current year amortization of the unamortized loss on refunding of bonds. There was no unamortized other post-employment benefit costs in 2019 due to net actuarial gains.

2018 Compared to 2017

The decrease in the deferred outflows balance of \$1.2 million is due to the current year reduction of the unamortized loss on refunding of bonds. There was no unamortized other post-employment benefit costs in 2018 due to net actuarial gains.

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Liabilities

Current Liabilities (in millions)

	2019	2018	2017
Accounts payable and accrued expenses	\$ 13.9	\$ 12.1	\$ 10.1
Accrued salaries and compensated absences	37.9	34.8	32.7
Current portion of long-term debt	5.2	5.0	4.8
Due to market participants	414.8	345.2	330.4
Generator noncompliance fines refund obligation	1.4	1.8	2.2
Total current liabilities	<u>\$ 473.2</u>	<u>\$ 398.9</u>	<u>\$ 380.2</u>

2019 Compared to 2018

Current liabilities at December 31, 2019 increased by \$74.3 million during the year. This increase is primarily due to higher amounts due to market participants as a result of increases in the balances of collateral accounts of \$27.5 million, market funds of \$26.6 million and interconnection study deposits of \$17.2 million, partially offset by a decrease in nonrefundable deposits pending distribution of \$1.7 million. Collateral funds were higher due to increased number of participants and increased market activity. Market funds are higher due to pass-through funds pending settlement at the end of the year. Interconnection study deposits are higher due to more projects that currently are in queue to be completed. Additionally, there were increases in the year-end balances for both accounts payable and accrued expenses of \$1.8 million and accrued salaries and compensated absences of \$3.1 million.

2018 Compared to 2017

Current liabilities at December 31, 2018 increased by \$18.7 million during the year. This increase is primarily due to higher amounts due to market participants as a result of increases in the balances of collateral accounts of \$8.2 million, market funds of \$5.9 million and in nonrefundable deposits pending distribution of \$2.6 million, partially offset by a decrease in interconnection study deposits of \$1.9 million. Additionally, there were increases in the year-end balances for both accounts payable and accrued expenses of \$2.0 million and accrued salaries and compensated absences of \$2.2 million.

Long-Term Debt (in millions)

Summarized activity of long-term debt for the year ended December 31, 2019, is as follows:

	Beginning of Year	Issuances (Payments Amortization)	End of Year
CIEDB Revenue Bonds, Series 2013	\$ 173.5	\$ (5.0)	\$ 168.5
Unamortized net premium			
Series 2013 bonds	7.3	(0.7)	6.6
Total long-term debt	180.8	(5.7)	175.1
Less: Current portion	5.0	0.1	5.1
Total long-term debt, net of current portion	<u>\$ 175.8</u>	<u>\$ (5.8)</u>	<u>\$ 170.0</u>

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Summarized activity of long-term debt for the year ended December 31, 2018, is as follows:

	Beginning of Year	Issuances (Payments/ Amortization)	End of Year
CIEDB Revenue Bonds, Series 2013	\$ 178.3	\$ (4.8)	\$ 173.5
Unamortized net premium			
Series 2013 bonds	7.9	(0.6)	7.3
Total long-term debt	186.2	(5.4)	180.8
Less: Current portion	4.8	0.2	5.0
Total long-term debt, net of current portion	\$ 181.4	\$ (5.6)	\$ 175.8

As of December 31, 2019, the Company had an underlying rating of A+ from S&P, A1 by Moody's and A+ by Fitch. Fitch rates the Company's outstanding Series 2013 bonds at AA- due to the additional support of the pledged deed of trust on the Company's primary building.

2019 Compared to 2018

At December 31, 2019 the Company had \$168.5 million of outstanding bonds issued through the California Infrastructure and Economic Development Bank ("CIEDB"). The decrease in long-term debt is primarily attributable to scheduled debt payments on the Series 2013 bonds in the amount of \$5.0 million in 2019.

2018 Compared to 2017

At December 31, 2018 the Company had \$173.5 million of outstanding bonds issued through the California Infrastructure and Economic Development Bank ("CIEDB"). The decrease in long-term debt is primarily attributable to scheduled debt payments on the Series 2013 bonds in the amount of \$4.8 million in 2018.

Other Noncurrent Liabilities (in millions)

	2019	2018	2017
Employee retirement plan obligations	\$ 10.7	\$ 19.1	\$ 17.2
Total other noncurrent liabilities	\$ 10.7	\$ 19.1	\$ 17.2

2019 Compared to 2018

Other noncurrent liabilities at December 31, 2019 were lower by \$8.4 million. The decrease is primarily due to the reduction in liability associated the post-retirement liability of \$9.5 million due to changes in actuarial assumptions, partially offset by the increase in executive benefit plans of \$1.1 million.

2018 Compared to 2017

Other noncurrent liabilities at December 31, 2018 were higher by \$1.9 million. The increase is primarily due to liabilities associated with executive benefit plans of \$0.6 million and in the post-retirement liability of \$1.3 million.

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Net Position (in millions)

	2019	2018	2017
Net investment in capital assets	\$ 16.8	\$ 11.7	\$ 24.0
Unrestricted	169.7	154.6	138.1
Total net position	<u>\$ 186.5</u>	<u>\$ 166.3</u>	<u>\$ 162.1</u>

2019 Compared to 2018

Net investment in capital assets at December 31, 2019 increased by \$5.1 million during the year. This increase is primarily attributable to increased commitment of funds for capital projects, partially offset by normal depreciation during the year. The unrestricted component of the net position at December 31, 2019 increased by \$15.1 million during the year primarily as a result of net cash flows from operations.

2018 Compared to 2017

Net investment in capital assets at December 31, 2018 decreased by \$12.1 million during the year. This decrease is primarily attributable to normal depreciation partially offset by a reduced commitment of funds for capital projects. The unrestricted component of the net position at December 31, 2018 increased by \$16.5 million during the year primarily as a result of net cash flows from operations.

Changes in Net Position

Condensed Statements of Revenues, Expenses and Changes in Net Position (in millions)

	2019	2018	2017
Operating revenues	\$ 222.7	\$ 223.8	\$ 220.6
Operating expenses	<u>205.6</u>	<u>213.7</u>	<u>194.9</u>
Operating income	17.1	10.1	25.7
Other expenses, net	<u>3.0</u>	<u>(5.7)</u>	<u>(5.1)</u>
Change in net position	<u>\$ 20.1</u>	<u>\$ 4.4</u>	<u>\$ 20.6</u>

Operating Revenues

2019 Compared to 2018

Total operating revenues slightly decreased during the year by \$1.1 million. This is primarily due to a decrease in GMC revenues of \$6.7 million due to a lower revenue requirement partially offset by increases in other revenues of \$5.6 million primarily due to charges related to the new reliability coordinator services.

2018 Compared to 2017

Total operating revenues increased during the year by \$3.2 million. This is primarily due to an increase in GMC revenues of \$1.1 million due to a higher revenue requirement and to increases in other revenues of \$2.2 million primarily due to revenues generated by the new reliability coordinator service.

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

Operating Expenses and Percentages (dollars in millions)

	2019	2018	2017
Salaries and related benefits	\$ 128.7	\$ 127.7	\$ 118.3
Communication and technology costs	19.6	19.3	19.7
Legal and consulting costs	18.4	18.9	17.7
Leases, facilities and other administrative costs	12.3	12.5	11.4
Depreciation and amortization	26.6	35.3	27.8
Total operating expenses	<u>\$ 205.6</u>	<u>\$ 213.7</u>	<u>\$ 194.9</u>
Salaries and related benefits	63 %	60 %	61 %
Communication and technology costs	9	9	10
Legal and consulting costs	9	9	9
Leases, facilities and other administrative costs	6	6	6
Depreciation and amortization	13	16	14
Total operating expenses (%)	<u>100 %</u>	<u>100 %</u>	<u>100 %</u>

2019 Compared to 2018

Operating expenses were \$8.1 million lower for the year ended December 31, 2019, compared to the year ended December 31, 2018. This is primarily due to lower depreciation expense of \$8.7 million, partially offset by slight increases in other expenses categories. Depreciation was lower in 2019 due to a lower depreciation base due to the full depreciation of certain assets.

2018 Compared to 2017

Operating expenses were \$18.8 million higher for the year ended December 31, 2018, compared to the year ended December 31, 2017. This is due to higher salaries and related benefits of \$9.4 million primarily as a result of increases in staffing and benefit costs and to a one-time charge in post-retirement costs. The ISO recognized the cost associated with changes to the eligibility terms of the post-retirement plan, which was approved in November 2018. In addition, depreciation expenses were higher by \$7.5 million.

Other Income (Expense), Net (in millions)

	2019	2018	2017
Interest income	\$ 11.0	\$ 2.5	\$ 3.2
Interest expense	<u>(8.0)</u>	<u>(8.2)</u>	<u>(8.3)</u>
Total other expense, net	<u>\$ 3.0</u>	<u>\$ (5.7)</u>	<u>\$ (5.1)</u>

2019 Compared to 2018

Total other expense decreased by \$8.7 million for the year ended December 31, 2019 compared to the year ended December 31, 2018. This decrease is attributable to \$8.5 million of higher interest income and \$0.2 million of lower interest expense. The increase in interest income is primarily due to higher earned interest of \$1.4 million and unrealized gains of \$6.5 million on the market value of investments as compared to unrealized losses and to higher capitalized interest of \$0.6 million in 2019. The slight decrease in interest expense is primarily due to lower outstanding debt as a result of bond repayments.

California Independent System Operator Corporation
Management's Discussion and Analysis (Unaudited)
December 31, 2019 and 2018

2018 Compared to 2017

Total other expense increased by \$0.6 million for the year ended December 31, 2018 compared to the year ended December 31, 2017. This increase is attributable to \$0.7 million of lower interest income and \$0.1 million of lower interest expense. The decrease in interest income is primarily due to unrealized losses on the market value of investments as compared to gains in 2017. The slight decrease in interest expense is primarily due to lower outstanding debt as a result of bond repayments.

California Independent System Operator Corporation
Statements of Net Position
December 31, 2019 and 2018

	2019	2018
Assets and deferred outflows		
Current assets		
Cash and cash equivalents, including restricted amounts	\$ 366,395	\$ 324,901
Accounts receivable	25,635	22,383
Short-term investments, including restricted amounts	72,476	69,927
Other current assets	6,067	6,437
Total current assets	<u>470,573</u>	<u>423,648</u>
Noncurrent assets		
Long-term investments, including restricted amounts	193,263	159,012
Fixed assets, net	170,858	167,080
Other assets	6,952	5,579
Total noncurrent assets	<u>371,073</u>	<u>331,671</u>
Total assets	<u>841,646</u>	<u>755,319</u>
Deferred outflows		
Unamortized loss on refunding of bonds	7,068	7,702
Total deferred outflows	<u>7,068</u>	<u>7,702</u>
Total assets and deferred outflows	<u>\$ 848,714</u>	<u>\$ 763,021</u>
Liabilities, deferred inflows and net position		
Current liabilities		
Accounts payable and accrued expenses	\$ 13,954	\$ 12,126
Accrued salaries and compensated absences	37,916	34,861
Current portion of long-term debt	5,165	4,970
Due to market participants	414,785	345,182
Generator noncompliance fines refund obligation	1,426	1,805
Total current liabilities	<u>473,246</u>	<u>398,944</u>
Noncurrent liabilities		
Long-term debt, net of current portion	170,027	175,788
Employee retirement plan obligations	10,733	19,067
Total noncurrent liabilities	<u>180,760</u>	<u>194,855</u>
Total liabilities	<u>654,006</u>	<u>593,799</u>
Deferred inflows		
Unamortized other post employment benefit costs	8,247	2,915
Total deferred inflows	<u>8,247</u>	<u>2,915</u>
Commitments and contingencies (Notes 10-12)		
Net position		
Net investment in capital assets	16,743	11,684
Unrestricted	169,717	154,623
Total net position	<u>186,460</u>	<u>166,307</u>
Total liabilities, deferred inflows and net position	<u>\$ 848,713</u>	<u>\$ 763,021</u>

The accompanying notes are an integral part of these financial statements.

California Independent System Operator Corporation
Statements of Revenues, Expenses and Changes in Net Position
Years Ended December 31, 2019 and 2018

	2019	2018
Operating revenues		
GMC revenue	\$ 192,669	\$ 199,400
Other revenues	30,017	24,488
Total operating revenues	<u>222,686</u>	<u>223,888</u>
Operating expenses		
Salaries and related benefits	128,726	127,712
Equipment leases and facility costs	2,149	2,201
Communications, technology and temporary staffing contracts	19,521	19,278
Legal and consulting services	18,422	18,961
Training, travel and professional dues	2,534	3,246
Insurance, administrative and other expenses	7,622	7,009
Depreciation and amortization	26,605	35,338
Total operating expenses	<u>205,579</u>	<u>213,745</u>
Operating income from operations	<u>17,107</u>	<u>10,143</u>
Other income (expense)		
Interest income	11,079	2,516
Interest expense	(8,033)	(8,250)
Total other expense, net	<u>3,046</u>	<u>(5,734)</u>
Change in net position	20,153	4,409
Net position		
Beginning of year	<u>166,307</u>	<u>161,898</u>
End of year	<u>\$ 186,460</u>	<u>\$ 166,307</u>

The accompanying notes are an integral part of these financial statements.

California Independent System Operator Corporation
Statements of Cash Flows
Years Ended December 31, 2019 and 2018

	2019	2018
Cash flows from operating activities		
Receipts from scheduling coordinators for GMC	\$ 188,014	\$ 198,534
Other receipts	31,420	19,373
Payments to employees and to others for related benefits	(129,777)	(120,862)
Payments to vendors/others	(48,463)	(46,514)
Receipts from market participants	519,094	560,857
Payments to market participants	(449,490)	(546,056)
Net cash provided by/used in operating activities	<u>110,798</u>	<u>65,332</u>
Cash flows from capital and related financing activities		
Repayment of bonds	(4,970)	(4,765)
Purchases and development of fixed assets	(29,697)	(25,347)
Interest on debt	(8,457)	(8,656)
Net cash used in capital financing activities	<u>(43,124)</u>	<u>(38,768)</u>
Cash flows from investing activities		
Purchases of investments	(99,432)	(89,339)
Sales and maturities of investments	62,632	52,731
Interest received	10,620	2,178
Net cash used in/provided by investing activities	<u>(26,180)</u>	<u>(34,430)</u>
Net decrease in cash and cash equivalents, restricted and unrestricted	41,494	(7,866)
Cash and cash equivalents, restricted and unrestricted		
Beginning of year	<u>324,901</u>	<u>332,767</u>
End of year	<u>\$ 366,395</u>	<u>\$ 324,901</u>

The accompanying notes are an integral part of these financial statements.

California Independent System Operator Corporation
Statements of Cash Flows
Years Ended December 31, 2019 and 2018

	2019	2018
Supplemental information		
Cash paid for interest for bonds	\$ 8,457	\$ 8,656
Reconciliation of income from operations to net cash provided by/used in operating activities		
Operating income from operations	\$ 17,107	\$ 10,143
Adjustments to reconcile income from operations to net cash provided by operating activities		
Depreciation and amortization	26,605	35,338
Changes in operating assets, deferred outflows and liabilities		
Accounts receivable and other assets	(4,580)	(6,368)
Deferred inflows/outflows	5,332	3,397
Accounts payable and other accrued expenses	(3,269)	8,021
Due to market participants	69,603	14,801
Net cash provided by/used in operating activities	<u>\$ 110,798</u>	<u>\$ 65,332</u>
Supplemental disclosure of noncash financing and investing activities		
Amortization of bond premium	\$ 596	\$ 614
Amortization of loss on refunding	(634)	(652)
Generator fines interest included in interest expense	379	362
Change in purchases and development of fixed assets included in accounts payable and accrued expenses	99	1,989

The accompanying notes are an integral part of these financial statements.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

1. Organization and Operations

The Company, a non-profit public benefit corporation, is responsible for ensuring the reliable and efficient use of the transmission grid in most of California and a part of Nevada. The Company operates this grid, which is one of the largest and most modern power grids in the world, as a balancing authority within the Western Electricity Coordinating Council. The Company conducts comprehensive planning for the future development of this grid.

The Company is regulated by the Federal Energy Regulatory Commission and complies with standards set by the North American Electric Reliability Corporation and the Western Electricity Coordinating Council. A five-member Board of Governors (the “Board”) appointed by the Governor of California and confirmed by the California State Senate governs the Company.

The Company’s wholesale energy market is the vehicle for providing open-access transmission service to users of the transmission grid. It includes a day-ahead market for all twenty-four hours of the next operating day, and a real-time market that schedules resources in 15 minute intervals and dispatches them in 5 minute intervals. The day-ahead market clears supply and demand offers for short-term energy purchases and sales. The real-time market clears supply offers and the Company’s forecast of demand. Together, these enable the economic scheduling and dispatch of generating resources to maintain continuous balance of supply and demand and management of congestion on the grid. The market also procures reserve capacity or ancillary services to maintain reliable operation under unexpected changes in grid conditions.

The Company continues to develop market enhancements to increase reliability, efficiency and the accuracy of market results. The current market prices energy at the points it enters and leaves the grid, which increases transparency by sending signals for competitive investments in transmission and generation. The market operates on an advanced flexible platform that helps to integrate renewable resources as well as demand response. These enhancements increase the functionality and flexibility of the market system to meet the on-going needs of market participants.

The Company also operates the Western Energy Imbalance Market (the “EIM”). This extension of the Company’s real-time energy market facilitates transactions with and among several balancing authority areas in the western interconnection that are not a part of the grid the Company operates. The EIM provides reliability, efficiency and renewable integration benefits to the West while also providing economic benefits to participants. The broader footprint for the real-time market provides more opportunities to integrate cleaner sources of energy, such as wind and solar, that may be produced in one area but needed in another. Eight balancing authorities are participating as of the end of 2019 and several others have committed to participate in the future.

In July 2019, the Company became the Reliability Coordinator for entities within its balancing area and a few other contiguous balancing areas. In November 2019, the services were expanded to balancing authorities and transmission operators throughout the West. The new service is referred to as RC West and as the Reliability Coordinator, the Company has the highest level of authority and responsibility for the reliable operation of the power grid, and has a wide-area view of the bulk electricity system. It is required to comply with federal and regional grid standards, and can authorize measures to prevent or mitigate system emergencies in day-ahead or real-time operations. As of the end of 2019, RC West is the Reliability Coordinator of record for forty-two balancing authorities and transmission operators in the West.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

In addition, the Company also performs a settlement and clearing function by charging and collecting payments from users of these services and paying providers of such services. Cash held by the Company on behalf of market participants is recorded in a restricted asset account with a corresponding liability due to market participants in the statements of net position. Except for the retention of restricted assets noted above, the Company's financial statements reflect a net reporting of market activities wherein the financial statements do not include the revenues and expenses, cash flows, or assets and liabilities associated with the market transactions it facilitates. GMC revenues have a priority claim against any market-related receipts. Any market defaults are allocated to market participants.

2. Summary of Significant Accounting Policies

Method of Accounting

The accompanying financial statements have been prepared on an accrual basis of accounting in accordance with accounting principles for proprietary funds as prescribed by the Government Accounting Standards Board ("GASB"), and where not in conflict with GASB pronouncements, accounting principles prescribed by the Financial Accounting Standards Board ("FASB"). The Company uses the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Net Presentation of Market Activity

The Company is a central counterparty to the market transactions that it financially settles, with certain limited exceptions. The Company is a buyer to every seller and a seller to every buyer, but market participants are responsible for supplying electricity and other services to their customers. The Company's market participants are the primary obligors with respect to those obligations. In the event of a market default, the defaulted amount is allocated among market participants, in accordance with the tariff. Market participants continue to bear the credit risk associated with any financial defaults by other market participants. Accordingly, the Company's financial statements continue to reflect a net reporting of market activities and exclude the revenues and expenses, cash flows and assets and liabilities associated with the market transactions the Company facilitates.

Use of Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents, restricted and unrestricted, include cash in bank accounts, money market funds and other highly liquid investments with original maturities of three months or less. Cash and cash equivalents are unrestricted unless specifically restricted by bond indentures or the tariff.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

Accounts Receivable and Revenue Recognition

The GMC is based on rates filed with the Federal Energy Regulatory Commission and is designed to recover the Company's operating costs, capital expenditures, debt service costs, and to provide for an operating reserve. The GMC billings are recognized as revenue. The initial billings are based on estimated meter data submitted by market participants and therefore may be subject to adjustment over time to reflect the difference between actual meter data and initial estimates.

The GMC is comprised of the following three service categories: market services, system operations and congestion revenue rights services.

The operating reserve is calculated separately for each GMC service category and accumulates until the reserve becomes fully funded (at 15% of budgeted annual operating costs for each rate service category). At December 31, 2019, the operating reserve for each service category was fully funded. In accordance with the tariff, any surplus operating reserve balance is applied as a reduction in revenue requirements in the following year. The tariff allows GMC rates to be adjusted not more than once per quarter. The rate for a service category is adjusted if the difference in actual versus projected volumes used to set the rate is equal or greater than 2%, or if the difference in actual versus estimated annual revenues for the service category is equal or greater than \$1.0 million. In May 2019, the rate for congestive revenue rights was adjusted and in August, 2018, rates for the system operations and market services were adjusted.

In addition, the Company bills the participants of the EIM an administrative charge based on gross imbalance EIM volumes and at a rate that is calculated annually to recover the ongoing costs of operating the EIM. The EIM administrative charge is included in other revenues of the Company.

The Company also bills the balancing authorities and transmission owners that avail of the services of RC West based on net energy loads and at a rate that is developed annually to recover the ongoing costs of the service. Participants with no load are charged a predetermined fixed amount. The Reliability Coordinator charge is included in other revenues of the Company.

Generator Interconnection Studies

The Company is responsible for conducting generator interconnection studies at the request of project sponsors who are developing generating plants that would become connected to the transmission grid operated by the Company. The project sponsors are required to make a deposit before any studies are performed. Sponsors may withdraw their projects from the studies at any time.

In accordance with the tariff, the Company charges the project sponsors the actual costs of the studies. Related study costs include both internal costs and external costs and are recorded, when incurred, as operating expenses. As costs are incurred, the Company recognizes revenue for the same amount, which is recorded as a component of other revenues. The Company applies the deposits against the related receivable as costs are incurred. Certain deposits related to projects abandoned by the project sponsors are retained by the Company and distributed in accordance with the tariff. These distributions do not result in revenues or expenses recognized by the Company.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

Generator Noncompliance Fines

From December 8, 2000 through June 30, 2001, the Company assessed noncompliance fines on participating generators that failed to fully comply with dispatch instructions when the Company was seeking to prevent an imminent or threatened system emergency. In accordance with the tariff, these fines are retained by the Company. The Company recorded the net realizable amount of such fines as revenue when the underlying noncompliance event occurred. However, the amount of the fines were based on the price of energy which has since been charged as a result of the still ongoing litigation over the California electricity crisis that have changed those prices. The Company adjusts such amounts in recognition of these developments, which affect the ultimate recognition of the fines charged and payments of the liability.

Investments

Investments, unrestricted or restricted, include instruments with original maturities of greater than three months or, instruments that have no stated maturity and the holding period is intended to be long-term in nature. These investments primarily consist of U.S. government securities, U.S. agency securities, corporate debt securities, and equity and fixed income mutual funds. Income on investments and the gain or loss on the fair value of investments is recorded as a component of interest income.

Fixed Assets

Fixed assets are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of assets. Most of the Company's investment in fixed assets consists of the headquarters building and the backup facility, both of which are being depreciated over twenty to thirty years, and information systems, which are being depreciated over three to seven years. The cost of improvements to or replacement of fixed assets is capitalized. When assets are retired or otherwise disposed of, the cost and related depreciation are removed from the accounts and any resulting gain or loss is reflected in the Company's Statement of Changes in Revenues, Expenses and Changes in Net Position for the period. Repair and maintenance costs are expensed when incurred. The Company capitalizes direct costs of salaries and certain indirect costs to develop or obtain software for internal use. Costs related to software development during the preliminary stage of a project and training and maintenance costs are expensed as incurred. Costs related to abandoned projects are expensed when the decision to abandon is made.

Other Assets

Other assets include certain employee retirement plan trust accounts.

Compensated Absences

The Company accrues vacation leave when the employee becomes eligible for the benefit. The Company does not record sick leave or other leave as a liability since there are no cash payments for sick leave or other leave made when employees terminate or retire. At December 31, 2019 and 2018, the total accrued liability for vacation was \$10.2 million and \$9.4 million, respectively.

Income Taxes

The Company is exempt from federal income tax under Section 501(c) (3) of the U.S. Internal Revenue Service (IRS) Code and is exempt from California State franchise income taxes.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

Net Position

The Company classifies its net position into three components:

- **Net investment in capital assets** - This component consists of capital assets, net of accumulated depreciation reduced by the outstanding debt balances, net of unamortized debt expenses.
- **Restricted** - This component consists of net assets with constraints placed on their use. Constraints include those imposed by debt covenants (excluding amounts considered in net capital, above) and by the Company's tariff and agreements with external parties.
- **Unrestricted** - This component consists of net assets that do not meet the definition of "invested in capital, net of related debt" or "restricted".

The Company had no restricted component of the net position at December 31, 2019 or 2018.

Concentration of Credit Risk

Financial instruments that subject the Company to credit risk consist primarily of accounts receivable relating to GMC billings due from market participants and cash and cash equivalents and investments.

Most of the Company's receivables are due from entities in the energy industry, including utilities, generation owners and other electricity market participants. For the years ended December 31, 2019 and 2018, approximately 38% and 43% of operating revenues, respectively, were from two market participants.

GMC revenues have a priority claim against any market-related receipts, which means that even if an entity defaults on an invoice containing a GMC charge, the Company receives the full GMC so long as sufficient funds were received on other market invoices to fund the GMC due to the Company.

The Company's concentration of credit risk related to cash and cash equivalents, and investments is described in Note 3.

New GASB Guidance

In March 2018, the Board issued GASB Statement No. 88 Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements to improve consistency in the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements, and to provide financial users with additional essential information about debt. The Company adopted the provisions of the standard effective January 1, 2019. The Company has no direct borrowing or direct placement debt and therefore management has determined that the new disclosures under this guidance are not applicable.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

3. Cash and Cash Equivalents and Investments

Investment Policy

The Company maintains an investment policy approved by its Board of Governors, which provides for the investment guidelines of the majority of the Company's unrestricted funds. The policy's guidelines address permissible investment types, credit risk, concentration of credit risk, interest rate risk, custodial credit risk and other investment portfolio parameters.

Restricted funds, such as bond proceeds and amounts due to market participants, are invested according to the Company's bond indentures and tariff, respectively, both of which are more restrictive than the investment policy. A portion of the Company's unrestricted funds, \$12.6 million as of December 31, 2019, has been designated by the Company as assets related to the liabilities associated with the Company's Retiree Medical Plan. These assets are governed by a separate investment policy approved by the Board of Governors which is aligned with the Company's long-term pension obligations to fund postretirement health benefits.

Credit Risk

To mitigate the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment, the Company limits purchases of investments to those rated at the time of purchase by two of the following nationally recognized statistical rating organizations: Standard & Poor's, Moody's, and Fitch. The investment must have at least two ratings that meet a minimum rating of at least A-1 (or equivalent) for short-term obligations such as commercial paper and at least A- (or equivalent) for longer term obligations like corporate medium-term notes. In the event of split ratings, the lowest rating is considered the overall credit rating. This policy includes exceptions that allow the Company to invest in certificates of deposit issued by lower rated banks up to the FDIC insured limit and to hold investments that have been downgraded below the policy rating minimums if approved to do so by the Company's internal investment committee.

Money Market Fund rules require the use of a floating net asset (NAV) for institutional prime money market funds and provide boards with the ability to impose liquidity fees, as well as implement redemption gates, for all nongovernmental money market funds during periods of stress in the financial markets. Under normal circumstances a floating NAV money market fund investment would continue to meet the definition of a cash equivalent. However, in the event credit or liquidity issues arise causing a meaningful decrease of the money market investments below \$1.0000 per share the classification of such investments as cash equivalents may not be appropriate. There were no credit or liquidity issues that resulted in meaningful decreases in the Company's money market investments in 2019. Therefore, amounts invested in money market funds remain classified as cash equivalents.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

Concentration of Credit Risk

This is the risk of loss associated with the percentage of an entity's investment in a single issuer. The Company's investment policy limits investments in any single issuer to no more than 5% of the portfolio, with exceptions relating to obligations issued by or fully guaranteed as to principal and interest by the United States, federal agencies or United States government sponsored enterprises, pooled investments such as money market funds, and investments procured in connection with Company bond offerings. As of December 31, 2019, other than the security exceptions described above, the Company had no investments in any one issuer representing more than 5% of total cash and cash equivalents and investments.

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of a depository financial institution or counterparty, the Company will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of an outside party.

The Company may maintain balances in bank accounts exceeding the FDIC insured level of \$250,000. In the event of a bank default, the Company's deposits may not be returned. The Company had unrestricted noninterest-bearing bank deposits in amounts of \$0.3 million and \$0.4 million at December 31, 2019 and 2018, respectively. Additionally, the Company had restricted noninterest-bearing bank deposits in amounts of \$47.4 million and \$20.9 million at December 31, 2019 and 2018, respectively. All other investments purchased by the Company, by policy, are held in custodial accounts by third-party custodians and are registered in the Company's name, thereby minimizing any custodial credit risk.

Interest Rate Risk

Changes in interest rates may adversely affect the fair value of the Company's investments and its cash flows. A sharp rise in market interest rates could have a material adverse impact on the fair value of our fixed income investment portfolio. Conversely, declines in interest rates, could have a material adverse impact on interest income for our investment portfolio. The Company's investment policy attempts to mitigate this risk by limiting the maximum maturity of any direct investment to five years with the exception of bond proceeds and the assets associated with the Retiree Medical Plan liabilities. The fixed income mutual funds that the Company invests in, also have similar duration targets.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

Summary of Balances

At December 31, 2019, the Company's cash, cash equivalents and investments consist of the following (in thousands):

Description	Credit Rating*	Remaining Maturities (in Years)			Total
		Less Than 1	1 - 5	More Than 5	
Cash and cash equivalents - unrestricted					
Deposits		\$ 65	\$ -	\$ -	\$ 65
Money Market Funds	AAAm	5,806			5,806
		<u>5,871</u>	<u>-</u>	<u>-</u>	<u>5,871</u>
Cash and cash equivalents - restricted					
Deposits		56,843	-	-	56,843
Money Market Funds	AAAm	303,681			303,681
		<u>360,524</u>	<u>-</u>	<u>-</u>	<u>360,524</u>
Total cash and cash equivalents		<u>366,395</u>	<u>-</u>	<u>-</u>	<u>366,395</u>
Short term investments - unrestricted					
Mutual Funds	Unrated	10,537			10,537
Certificate of Deposits	FDIC Insured	4,839			4,839
Government-sponsored Enterprises	AA+	11,606			11,606
U.S Treasury	AA+	19,031			19,031
Corporate Notes	AAA	1,002			1,002
Corporate Notes	AA-	1,000			1,000
Corporate Notes	A+	502			502
		<u>48,517</u>	<u>-</u>	<u>-</u>	<u>48,517</u>
Short term investments - restricted					
Certificate of Deposits	FDIC Insured	23,959			23,959
		<u>23,959</u>	<u>-</u>	<u>-</u>	<u>23,959</u>
Total short-term investments		<u>72,476</u>	<u>-</u>	<u>-</u>	<u>72,476</u>
Long-term investments - unrestricted					
Affinity Insurance Ltd.	Unrated			37	37
Certificate of Deposits	FDIC Insured		3,232		3,232
Mutual Funds	Unrated		116,348		116,348
U.S. Treasury	AA+		21,214		21,214
Government-sponsored enterprises	AA+		9,004		9,004
Corporate Notes	AAA				-
Corporate Notes	AA+		1,013		1,013
Corporate Notes	AA-		1,998		1,998
Corporate Notes	A+		3,553		3,553
Corporate Notes	A		5,771		5,771
Corporate Notes	A-		902		902
Corporate Notes	BBB+		2,667		2,667
		<u>-</u>	<u>165,702</u>	<u>37</u>	<u>165,739</u>
Long-term investments - restricted					
Certificate of Deposits	FDIC Insured		27,524		27,524
Total long-term investments		<u>-</u>	<u>193,226</u>	<u>37</u>	<u>193,263</u>
Total cash, cash equivalents and investments		<u>\$ 438,871</u>	<u>\$ 193,226</u>	<u>\$ 37</u>	<u>\$ 632,134</u>

* Represents S&P rating.

California Independent System Operator Corporation

Notes to Financial Statements

December 31, 2019 and 2018

At December 31, 2018, the Company's cash, cash equivalents and investments consist of the following (in thousands):

Description	Credit Rating*	Remaining Maturities (in Years)			Total
		Less Than 1	1 - 5	More Than 5	
Cash and cash equivalents - unrestricted					
Deposits		\$ 1,401	\$ -	\$ -	\$ 1,401
Money Market Funds	AAAm	36,695			36,695
		<u>38,096</u>	<u>-</u>	<u>-</u>	<u>38,096</u>
Cash and cash equivalents - restricted					
Deposits		28,983			28,983
Money Market Funds	AAAm	257,822			257,822
		<u>286,805</u>	<u>-</u>	<u>-</u>	<u>286,805</u>
Total cash and cash equivalents		<u>324,901</u>	<u>-</u>	<u>-</u>	<u>324,901</u>
Short term investments - unrestricted					
Mutual Funds	Unrated	15,167			15,167
Certificate of Deposits	FDIC Insured	3,543			3,543
Government-sponsored Enterprises	AAA	1,973			1,973
Government-sponsored Enterprises	AA+	6,448			6,448
U.S Treasury	AA+	20,892			20,892
Corporate Notes	AA	1,501			1,501
Corporate Notes	AA-	2,716			2,716
Corporate Notes	A+	1,993			1,993
Corporate Notes	A	2,581			2,581
Corporate Notes	A-	995			995
		<u>57,809</u>	<u>-</u>	<u>-</u>	<u>57,809</u>
Short term investments - restricted					
Certificate of Deposits	FDIC Insured	12,118			12,118
		<u>12,118</u>	<u>-</u>	<u>-</u>	<u>12,118</u>
Total short-term investments		<u>69,927</u>	<u>-</u>	<u>-</u>	<u>69,927</u>
Long-term investments - unrestricted					
Affinity Insurance Ltd.	Unrated			37	37
Certificate of Deposits	FDIC Insured		4,341		4,341
Mutual Funds	Unrated		33,057		33,057
U.S. Treasury	AA+		39,723		39,723
Government-sponsored enterprises	AA+		22,248		22,248
Corporate Notes	AAA		989		989
Corporate Notes	AA+		1,964		1,964
Corporate Notes	AA-		1,936		1,936
Corporate Notes	A+		3,947		3,947
Corporate Notes	A		5,548		5,548
Corporate Notes	A-		881		881
Corporate Notes	BBB+		2,604		2,604
		<u>-</u>	<u>117,238</u>	<u>37</u>	<u>117,275</u>
Long-term investments - restricted					
Certificate of Deposits	FDIC Insured		41,737		41,737
Total long-term investments		<u>-</u>	<u>158,975</u>	<u>37</u>	<u>159,012</u>
Total cash, cash equivalents and investments		<u>\$ 394,828</u>	<u>\$ 158,975</u>	<u>\$ 37</u>	<u>\$ 553,840</u>

* Represents S&P rating.

The Company's cash, cash equivalents and investments at December 31 consist of unrestricted and restricted funds as follows (in thousands):

	2019	2018
Unrestricted funds, operating account	\$ 220,127	\$ 213,180
Restricted funds, market participants	<u>412,008</u>	<u>340,660</u>
Total cash, cash equivalents and investments	<u>\$ 632,135</u>	<u>\$ 553,840</u>

California Independent System Operator Corporation
Notes to Financial Statements
December 31, 2019 and 2018

Cash, cash equivalents and investments restricted for market participants consist of the following at December 31 (in thousands):

	2019	2018
Security deposits	\$ 213,038	\$ 185,469
Market funds pending settlement	101,009	75,384
Pass-through fees due to others	12,995	11,975
Generator interconnection study deposits	75,904	59,710
Non-refundable deposits pending distribution	9,062	8,122
Total amounts restricted for market participants	<u>\$ 412,008</u>	<u>\$ 340,660</u>

Cash, cash equivalents and investments restricted for market participants consist of amounts held by the Company to be remitted to market participants or others on their behalf. Security deposits are amounts received from market participants who are required to post collateral for their transactions in the Company's markets. Market funds pending settlement consist of amounts collected during the settlement and clearing function that will pass-through to market participants in subsequent periods. Pass-through fees due to others consist of amounts collected from market participants that will be paid to market participants for summer reliability, startup costs and emission costs. Generator interconnection study deposits are amounts collected for future studies. Nonrefundable deposits consist of interconnection amounts which are nonrefundable to project sponsors in accordance with tariff requirements.

4. Fixed Assets

Changes in the Company's fixed assets for the year ended December 31, 2019, are as follows (in thousands):

	2018	Additions and Transfers In	Disposals and Transfers Out	2019
Nondepreciable fixed assets				
Land	\$ 10,561	\$ -	\$ -	\$ 10,561
Work-in-progress	16,852	30,383	(40,333)	6,902
	<u>27,413</u>	<u>30,383</u>	<u>(40,333)</u>	<u>17,463</u>
Depreciable fixed assets				
Regional transmission operator software	421,838	35,381	(13,388)	443,831
Regional transmission operator hardware	20,754	1,715	(439)	22,030
Communication equipment	10,833	1,007	(26)	11,814
ISO Facilities (HQ and Lincoln)	161,517	56	-	161,573
Furniture, fixtures and other	15,899	2,174	(126)	17,947
	<u>630,841</u>	<u>40,333</u>	<u>(13,979)</u>	<u>657,195</u>
Less: Accumulated depreciation	<u>(491,174)</u>	<u>(26,605)</u>	<u>13,979</u>	<u>(503,800)</u>
	<u>139,667</u>	<u>13,728</u>	<u>-</u>	<u>153,395</u>
Total fixed assets, net	<u>\$ 167,080</u>	<u>\$ 44,111</u>	<u>\$ (40,333)</u>	<u>\$ 170,858</u>

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Changes in the Company's fixed assets for the year ended December 31, 2018, are as follows (in thousands):

	2017	Additions and Transfers In	Disposals and Transfers Out	2018
Nondepreciable fixed assets				
Land	\$ 10,561	\$ -	\$ -	\$ 10,561
Work-in-progress	16,292	23,520	(22,960)	16,852
	<u>26,853</u>	<u>23,520</u>	<u>(22,960)</u>	<u>27,413</u>
Depreciable fixed assets				
Regional transmission operator software	406,984	19,328	(4,474)	421,838
Regional transmission operator hardware	28,539	3,000	(10,785)	20,754
Communication equipment	12,077	213	(1,457)	10,833
ISO Facilities (HQ and Lincoln)	161,365	152	-	161,517
Furniture, fixtures and other	15,646	267	(14)	15,899
	<u>624,611</u>	<u>22,960</u>	<u>(16,730)</u>	<u>630,841</u>
Less: Accumulated depreciation	<u>(472,566)</u>	<u>(35,338)</u>	<u>16,730</u>	<u>(491,174)</u>
	<u>152,045</u>	<u>(12,378)</u>	<u>-</u>	<u>139,667</u>
Total fixed assets, net	<u>\$ 178,898</u>	<u>\$ 11,142</u>	<u>\$ (22,960)</u>	<u>\$ 167,080</u>

5. Generator Noncompliance Fines

In 2000 and 2001, the Company billed generator noncompliance fines to market participants, of which the Company collected \$60.7 million. Generally, these fines were assessed at a rate corresponding to twice the highest price paid in the Company's markets for energy during the interval when the generator failed to comply the dispatch instruction. Because the energy prices for this period are being adjusted as a result of the Federal Energy Regulatory Commission Refund Case, as described in Note 12, the amount of the fines to be retained by the Company is being reduced, with any surplus collections being refunded with interest to market participants. The Company accrues interest in accordance with rulings of the Federal Energy Regulatory Commission on the portion of fines collected in excess of the estimated realizable amount, which is to be refunded to market participants when the amounts are settled. The ultimate settlement of fines is expected after the conclusion of the proceedings in the Federal Energy Regulatory Commission Refund Case and the financial settlement of the California Power Exchange (Cal PX).

Based on estimates of the mitigated energy prices, the Company recorded fine revenues totaling \$29.5 million as opposed to the \$60.7 million collected, resulting in a refund liability of \$31.2 million before interest. The Company reduced its refund liability (and associated interest obligation) by distributing funds to market participants that approximately equal its refund liability in connection with settlement agreements approved by the Federal Energy Regulatory Commission, including a distribution of \$43.9 million in 2010.

Each year, the Company adjusts its estimated refund liability based on updated information it obtains related to interest and other factors that will serve to change the estimated amount of generator fine proceeds the Company will ultimately retain, which consequently modifies the generator fine collections that will be returned to market participants.

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Based on estimates obtained in 2019 from parties involved in these proceedings and an updated estimate of the proportionate allocation of shortfalls to the Company in 2019, there was a decrease in the estimated liability of \$0.4 million. As of December 31, 2019, the Company estimates the remaining liability (including interest) related to generator noncompliance fines to be \$1.4 million.

There are significant uncertainties associated with the final settlement of generator noncompliance fines. While the estimated liability stated above is based on the best information available, adjustments are likely to occur in the future to the estimated liability associated with interest and other shortfalls that will be incurred by the Cal PX, and allocated to the Company in connection with final disposition of the funds and obligations arising from the events of 2000 and 2001.

6. Long-term Debt and Related Agreements

Long-term debt consists of the following at December 31 (in thousands):

	2019	2018
CIEDB Revenue Bonds, Series 2013		
Fixed interest rates of 2.00% - 5.25% with maturities through 2039	\$ 168,545	\$ 173,515
Unamortized net premium		
Series 2013 bonds	6,647	7,243
Total long-term debt	175,192	180,758
Less: Current portion	(5,165)	(4,970)
Total long-term debt, net of current portion	\$ 170,027	\$ 175,788

Summarized activity of long-term debt for the year ended December 31, 2019, is as follows (in thousands):

	Beginning of Year	Payments	End of Year
CIEDB Revenue Bonds, Series 2013	\$ 173,515	\$ (4,970)	\$ 168,545
Total long-term debt	\$ 173,515	\$ (4,970)	\$ 168,545

Summarized activity of long-term debt for the year ended December 31, 2018, is as follows (in thousands):

	Beginning of Year	Payments	End of Year
CIEDB Revenue Bonds, Series 2013	\$ 178,280	\$ (4,765)	\$ 173,515
Total long-term debt	\$ 178,280	\$ (4,765)	\$ 173,515

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Scheduled future debt service payments for these bonds as of December 31, 2019, are as follows (in thousands):

	Principal	Interest	Total
2020	\$ 5,165	\$ 8,242	\$ 13,407
2021	5,395	8,005	13,400
2022	5,640	7,760	13,400
2023	5,885	7,489	13,374
2024	6,180	7,187	13,367
2025 - 2029	35,875	30,828	66,703
2030 - 2034	45,870	20,591	66,461
2035 - 2039	58,535	7,602	66,137
Total debt service payments	<u>\$ 168,545</u>	<u>\$ 97,704</u>	<u>\$ 266,249</u>

The Series 2013 bonds are supported by a pledge of the Company's revenues and operating reserves. In addition, the bonds are supported by a deed of trust on the Company's headquarters building and land.

Interest expense recorded by the Company related to long-term debt includes interest paid on the bonds and amortization of the bond premium.

7. Supplemental Disclosure of Derivative Financial Instruments – Congestion Revenue Rights ("CRRs")

As described in Note 2, the Company is the central counterparty to market participant transactions, which include CRRs. CRRs are financial instruments that enable market participants to reduce their congestion-related price risk when delivering or selling energy on the grid. A CRR provides an economic hedging mechanism against congestion charges that can be transacted by market participants separately from transmission service. These instruments are considered derivative financial instruments for accounting purposes, which would require presentation at fair value if they were recognized as assets and liabilities of the Company.

Consistent with its role in facilitating other market transactions, the Company facilitates the allocation, auctioning and ultimate settlement of CRRs in its market, but does not have economic risks and rewards associated with these financial instruments. Any market defaults are allocated to market participants. As such, they are not recognized as assets and liabilities in the Company's Statements of Net Position. However, unlike other market transactions administered by the Company, CRRs can be outstanding for extended periods of time. At December 31, 2019, the average life of the Company's CRRs was 7.84 years and there were a total of 99 CRR holders, compared to 3.9 years and 100 CRR holders at December 31, 2018. The estimated net fair value of both the CRR assets and liabilities as of December 31, 2019 was \$841.4 million related to a total of 713,388 megawatts, which vary in length from one month to several years. This is compared to \$940.5 million related to a total of 610,212 megawatts at December 31, 2018. The value of each megawatt of CRR is a function of numerous factors including the length of period the CRR covers.

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While these amounts are not presented in the Statements of Net Position, their estimated net fair value is disclosed for informational purposes given their longer term nature. Their fair value was determined based on several factors including actual auction prices transacted in the most recent annual and monthly auction processes, the Company's models which calculate the estimated value of all transmission constraints, net present value discounting and other factors. In addition to the high level of uncertainty associated with these inputs to the valuation calculation model, changes to actual or anticipated flows and constraints on the transmission system managed by the Company or in the value of electricity flowing on the transmission system create volatility that can significantly affect CRR values. Changes in generation, load, weather, and transmission outages are other factors that can have immediate and significant impact on CRR values.

The following is a summary of CRR megawatts, by type, outstanding at December 31, 2019:

Type (in Megawatts)	
Monthly (January 2020)	37,462
Annual (February - December 2020)	374,754
Long Term (January 2020 - December 2029)	301,172
Total CRRs (Megawatts)	<u>713,388</u>

The following is a summary of CRR megawatts, by type, outstanding at December 31, 2018:

Type (in Megawatts)	
Monthly (January 2019)	32,025
Annual (February - December 2019)	250,347
Long Term (January 2019 - December 2028)	327,840
Total CRRs (Megawatts)	<u>610,212</u>

8. Fair Value of Financial Instruments

Accounting guidance for fair value measurement requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard establishes a three-tier fair value hierarchy based on the level of independent, objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is as follows:

- Level 1 Applies to assets or liabilities for which there are quoted prices in active markets that are accessible at the measurement date for identical unrestricted assets or liabilities.
- Level 2 Applies to assets or liabilities for which there are inputs other than quoted prices that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs and significant value drivers are observable or can be derived principally from, or corroborated by, observable market data.

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Level 3 Applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability. Financial assets and liabilities are classified in their entirety based on the level of input that is considered most significant to the fair value measurement.

The Company's assets measured at fair value on a recurring basis at December 31, 2019, were as follows (in thousands):

	Total	Level 1	Level 2	Level 3
Cash	\$ 56,909	\$ -	\$ -	\$ -
Cash equivalents				
Money market funds	309,487	309,487		
Short-term investments				
Publicly traded mutual funds	10,537	10,537		
U.S. Treasury securities	19,031		19,031	
U.S. government agency securities	11,606		11,606	
Negotiable certificates of deposit	28,799		28,799	
Corporate debt securities	2,503		2,503	
Long-term investments				
U.S. Treasury securities	21,215		21,215	
U.S. government agency securities	9,004		9,004	
Negotiable certificates of deposit	30,756		30,756	
Corporate debt securities	15,902		15,902	
Publicly traded mutual funds	116,349	116,349		
Captive insurance investment	37			37
Total cash, cash equivalents and investments	<u>\$ 632,135</u>	<u>\$ 436,373</u>	<u>\$ 138,816</u>	<u>\$ 37</u>

The Company's assets measured at fair value on a recurring basis at December 31, 2018, were as follows (in thousands):

	Total	Level 1	Level 2	Level 3
Cash	\$ 30,384	\$ -	\$ -	\$ -
Cash equivalents				
Money market funds	294,517	294,517		
Short-term investments				
Publicly traded mutual funds	15,167	15,167		
U.S. Treasury securities	20,892		20,892	
U.S. government agency securities	8,421		8,421	
Negotiable certificates of deposit	15,661		15,661	
Corporate debt securities	9,786		9,786	
Long-term investments				
U.S. Treasury securities	39,723		39,723	
U.S. government agency securities	22,248		22,248	
Negotiable certificates of deposit	46,078		46,078	
Corporate debt securities	17,869		17,869	
Publicly traded mutual funds	33,057	33,057		
Captive insurance investment	37			37
Total cash, cash equivalents and investments	<u>\$ 553,840</u>	<u>\$ 342,741</u>	<u>\$ 180,678</u>	<u>\$ 37</u>

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Level 1 money market funds and publicly traded mutual funds are determined by using quoted prices in active markets. Level 2 fixed income securities are priced using quoted market prices for similar instruments or nonbinding market prices that are corroborated by observable market data. Level 3 assets are nonnegotiable instruments which require the use of unobservable inputs in determining fair value.

The fair value of the employee retirement plan trust accounts at December 31, 2019 and 2018 was \$5.0 million and \$3.9 million, respectively. These accounts are invested in cash equivalents and publicly traded mutual funds and are classified as Level 1 assets.

The fair value of the Company's long-term debt as of December 31, 2019 and 2018 was \$185.9 million and \$190.0 million, respectively. The fair value of fixed rate long-term debt, which includes the short-term portion, is based on current market quotes which are classified as a Level 2 on the fair value hierarchy at both December 31, 2019 and 2018.

The carrying values reported in the balance sheet for current assets and liabilities, excluding amounts discussed above, approximate fair value.

Additionally, the Company had \$17.0 million and \$10.4 million at December 31, 2019 and 2018, respectively, in trust related to the post-employment medical benefit plan (Note 9). At December 31, 2019 and 2018, these trust assets consist primarily of mutual funds and are classified as Level 1 within the fair value hierarchy.

9. Employee Benefit Plans

The Company maintains a number of employee benefit plans. A description of the Plans and key provisions is included below. Obligations included in the Company's Statements of Net Position related to these plans consist of the following at December 31 (in thousands):

	2019	2018
Post-employment medical benefit plan	\$ 5,727	\$ 15,164
Executive pension restoration plan	3,436	2,709
Executive savings plan	1,570	1,194
Total employee retirement plan obligations	<u>\$ 10,733</u>	<u>\$ 19,067</u>

Post-Employment Medical Benefit Plan

Plan Description

The Company sponsors the California ISO Retirees Medical Plan, a single employer defined benefit plan, to provide post-employment health care benefits to all eligible employees who retire from the Company and meet certain eligibility requirements. The Plan was amended in November 2018 effective January 1, 2019. As of January 1, 2019, the Plan is closed to new hires and rehires. Additionally, eligibility for retirement was changed to age 55 with at least 10 years of continuous service, whose combined age and years of continuous service equals or exceeds 70. For employees born after January 1, 1969, pre-65 spousal coverage ends on the participants' 75th birth date. Post-65 spousal coverage is unchanged; a spouse who is removed from pre-65 coverage may obtain coverage once they reach age 65.

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Depending on years of service, the Company pays between 60% and 70% of the premiums on the coverage elections made by the beneficiaries not to exceed \$8,000 per year for individual retiree coverage and \$16,000 per year for retiree plus spouse and/or dependent. Plan benefits are available to eligible retirees and to their spouses, domestic partners and eligible dependents, as provided for under the terms of the Plan. Current plan coverage extends for the lifetime of the participants and their beneficiaries, except for dependents, which generally terminates at age 26.

The Plan provides a monthly amount per post-65 retiree and eligible post-65 dependents towards the cost of enrolling in any of the Medicare supplemental programs, and at the Company's discretion, may increase the allowance annually. Supplemental program costs in excess of the provided monthly amount are the responsibility of the retirees and or dependents.

There are 525 active employees of which, 99 are fully eligible to retire and 74 retirees eligible to receive benefits pursuant to the Plan as of December 31, 2019.

Funding and Investment Policy

The Company has established a trust for the purposes of funding the Plan. The trust was established as a tax-exempt voluntary employees' beneficiary association. All assets of the trust are to be used for the exclusive benefit of the participants and beneficiaries of the Plan. Although the Company has fiscal accountability for these assets and holds them in a fiduciary capacity, the assets are not considered assets of the Company and are therefore not included in the Statements of Net Position of the Company. As of December 31, 2019 and 2018, the trust assets were \$17.0 million and \$10.4 million, respectively. The Plan issues audited trust financial statements annually, which are available upon request.

The Company's current funding policy is to annually contribute an amount such that the total amount in the trust approximates the actuarially determined liability attributable to retirees and their spouses and to active participants who are fully eligible to retire. Based on this current funding policy, the trust was fully funded at December 31, 2019. The Company does not provide funding into the trust related to future obligations associated with employees who have not become eligible to retire, although, as part of its rate structure, the Company collects annual amounts associated with future other post-employment benefit ("OPEB") obligations for all employees. As a result, assets equivalent to the actuarially determined liability attributable to employees not yet eligible to retire are segregated in a separate custody account. The amounts are adjusted annually to match the current actuarially determined liability. These segregated assets are reported in the Company's Statements of Net Position.

The assets of both the trust and the Company's segregated funds are invested in accordance with the Board approved California ISO Retirees Medical Plan Investment Policy. In general, the assets are invested in a mix of equity and fixed income mutual funds.

The Company also currently funds disbursements for the employer portion of the premiums on the coverage elections made by the pre-65 beneficiaries, their spouse and, if any, dependents, and the monthly contributions to the post-65 retirees and their post-65 dependents from the segregated funds.

Net OPEB Liability ("NOL")

The Company's annual OPEB liabilities as of December 31, 2019 and 2018, respectively, was determined by an actuarial valuation as of those dates.

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Actuarial Methods and Assumptions

The total OPEB liability in the December 31, 2019 and 2018 actuarial valuations were determined using actuarial assumptions, applied to all respective periods included in the measurement. The following significant actuarial methods and assumptions were used in the calculation.

	2019	2018
Discount Rate	5.70 %	6.00 %
Expected Long-term Rate of Return on Plan Assets	5.70	6.00
Rate of Compensation Increase	3.00	3.00
Current Health Care Cost Trend Rate	6.50	6.33
Ultimate Health Care Cost Trend Rate	5.00	5.00
Year of Ultimate Trend Rate	2027	2023

The mortality rates were based on the Pri-2012 mortality tables (Base mortality table year "2012", Table type "Total", Health type "Healthy", Table weighing "Benefit"), with Scale MP-2019 for mortality improvements to reflect the most recent mortality experience published by the Society of Actuaries. Separate rates, based on the "Employee" table, were developed for annuitants and nonannuitants. Same rates also were developed for retirees and contingent annuitants and contingent survivors.

The expected long term return on assets assumption reflects the Company's estimate of future experience for the trust asset returns reflecting the Plan's current asset allocation and any expected changes during the current plan year, current market conditions and the Company's expectations for future market conditions. The long-term rate of return was determined using a building-block method in which best estimate ranges of expected investment rates of return over the next 20 years are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the current asset allocation percentage. The current asset allocation and best estimates of the rates of return for each major asset class are summarized in the following table.

Asset Class	Asset Allocation	Long-Term Expected Rate of Return
International stocks	27.9 %	7.25 %
BarCap aggregate funds	24.1	3.06
Large-cap stocks	20.0	7.25
10-year TIPS	9.5	2.81
Cash equivalents	10.9	2.64
Small cap stocks	3.8	6.85
Mid-cap stocks	3.8	7.25
	<u>100 %</u>	