REPORT OF INDEPENDENT AUDITORS
AND CONSOLIDATED FINANCIAL STATEMENTS
WITH SUPPLEMENTARY INFORMATION

TURLOCK IRRIGATION DISTRICT

December 31, 2020 and 2019

MOSSADAMS

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Report of Independent Auditors

To the Board of Directors of
Turlock Irrigation District

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of Turlock Irrigation District (the "District"), which comprise the consolidated statements of net position as of December 31, 2020 and 2019, and the related consolidated statements of revenues, expenses, and changes in net position and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We did not audit the Amended and Restated Plan for Employees and Elective Officers of the Turlock Irrigation District, (the, "Retirement Plan") which consists of the statements of fiduciary net position as of June 30, 2020 and 2019, statements of changes in fiduciary net position for the years then ended, and Note 11, Fiduciary Fund Retirement Plan. Those statements and Note 11 were audited by other auditors, whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Retirement Plan, is based solely on the report of the other auditors. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, and the California Code of Regulations, Title 2, Section 1131.2, State Controller's *Minimum Audit Requirements* for California Special Districts. Those standards require that we plan and perform the audits 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 the auditor's 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, the auditor considers internal control relevant to the entity'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 entity'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 District as of December 31, 2020 and 2019, 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 Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in net pension liability and related ratios, schedule of retirement plan contributions, schedule of changes in net OPEB liability and related ratios and schedule of OPEB plan contributions on pages 3 through 14 and 69 through 72 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an 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 financial statements, and other knowledge we obtained during our audit of the 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.

Moss Adams LLP

Portland, Oregon
April 27, 2021

Using this financial report

The following management's discussion and analysis of Turlock Irrigation District (TID or the District) and its financial performance provides an overview of TID's financial activities for the years ended December 31, 2020 and 2019. Management's discussion and analysis should be read in conjunction with TID's financial statements and accompanying notes, which follow this section.

Background

TID is an irrigation district organized under the provisions of the Wright Act and has the powers provided therein. Organized in 1887, TID was the first of 65 irrigation districts to be formed in the State of California (the "State"). Its Board of Directors (the "Board") governs TID. The five members of the Board are elected from geographic divisions of TID for staggered four-year terms. The Board appoints a general manager and certain other senior managers who are responsible for the operations of TID.

Since 1923, TID has provided all the electric service within its 425 square-mile service area, which includes portions of Stanislaus, Merced and Tuolumne counties. TID's service area includes the cities of Turlock, Ceres, Hughson and a part of Modesto and the unincorporated communities of Ballico, Keyes, Denair, Hickman, Delhi and Hilmar.

Since 2003, TID has owned and operated the electric distribution facilities in a portion of the west side of Stanislaus County, including the City of Patterson, the community of Crows Landing and certain adjacent rural areas (collectively, the "Westside"). The Westside covers approximately 237 square miles.

To provide electric service within its service area, TID owns and operates an electric system, which includes generation, transmission and distribution facilities. Its generating facilities include hydroelectric, wind, natural gas-fired and other facilities. TID also purchases power and transmission service from other sources and participates in other utility arrangements.

TID also supplies water for irrigation use within 308 square miles of its service area, comprising approximately 5,800 parcels of land and 250 miles of gravity flow canals and laterals. TID's electric and irrigation systems are operated and accounted for as a single entity; hence, revenues from both systems are available to pay the obligations of TID.

Rates and charges

TID's Board has full and independent authority to establish revenue levels and rate schedules for all electric service provided by TID. TID is not subject to retail rate regulation by any state or federal regulatory body, and is empowered to set retail rates effective at any time. TID has maintained rates for electric service that have been sufficient to provide for all operating and maintenance costs and expenses, debt service, repairs, replacements and renewals and to provide for base capital additions to the system. The Board fixes rates and charges of TID based on a cost of service methodology.

TID had no electric rate increases for the years beginning January 1, 2020 and January 1, 2019.

Irrigation rates in a normal year are $60/acre and in a dry year are $68/acre, and there are varying tiers based on the amount of water used ranging from $2 to $20 per acre-foot. There were no irrigation rate schedule changes for 2020.

TID has a credit requirement for all new service connections, which requires new customers to place a deposit with TID.

Financial reporting

TID maintains its accounts in accordance with generally accepted accounting principles for proprietary funds as prescribed by the Governmental Accounting Standards Board (GASB). TID is accounted for as an enterprise fund and is financed and operated in a manner similar to that of a private business enterprise. TID 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. TID's accounting records generally follow the Uniform System of Accounts for public utilities and licensees prescribed by the Federal Energy Regulatory Commission (FERC), except as it relates to the accounting for contributions in aid of construction (CIAC).

TID provides energy for residential, commercial, and industrial use and provides irrigation water for agricultural use. Accordingly, TID defines operating revenues as sales of energy, wholesale sales of energy and natural gas, irrigation sales, and other miscellaneous energy and irrigation service revenues. Operating expenses include the costs of sales and services, administration expenses, depreciation, depletion and amortization. Nonoperating revenue and expense typically includes interest income on investments, interest expense, and other miscellaneous items.

In accordance with the GASB accounting rules which govern regulatory accounting, the Board has taken various regulatory actions for ratemaking purposes that result in the deferral of revenue or expense recognition. At December 31, 2020 and 2019, TID had total regulatory assets of $47.0 million and $50.6 million, respectively, and total regulatory credits of $153.3 million and $128.2 million, respectively. The regulatory credits are recognized in the statement of revenues, expenses and changes in net position when the Board concludes that they should be used for ratemaking purposes.

Investment policies and procedures

The Board reviews TID's investment policy on an annual basis. TID has contracted with Public Financial Management, Inc. (PFM), a leading investment manager of public entity funds, to invest TID's cash and investments. PFM only purchases investments on behalf of TID which are permitted by TID's investment policy. The Bank of New York Mellon Trust Company holds these investments in custody.

Debt management program

TID regularly reviews its debt structure, which includes the issuance of refunding bonds to achieve debt service savings.

Component units

The District has two component units, the Walnut Energy Center Authority (WECA) and the Tuolumne Wind Project Authority (TWPA), both of which were formed for the purposes of developing and operating generation facilities for the District's use. WECA operates a 250 MW natural gas fueled generation facility located in TID's service territory. TWPA has a membership interest in a 136.6 MW wind farm, consisting of 62 wind-turbine generators located in Klickitat County, Washington. Although WECA and TWPA are separate legal entities from TID, they are reported as part of TID because of the extent of their operational and financial relationships with TID. Additionally, TID has fiduciary responsibility for a single-employer group pension plan, the Amended and Restated Plan for Employees and Elective Officers of the Turlock Irrigation District, (the, "Retirement Plan"). The Retirement Plan is a component unit which is presented as a fiduciary fund and the activities of the Retirement Plan are recorded in the Statements of Fiduciary Net Position of the Retirement Plan and Statements of Changes in Fiduciary Net Position of the Retirement Plan. Accordingly, all operations of these component units are consolidated into TID's financial statements.

Using this financial report

This annual financial report consists of management's discussion and analysis and the financial statements, including notes to the financial statements. The annual financial report reflects the activities of TID primarily funded through the sale of energy, transmission, and distribution services to its retail and wholesale customers, as well as irrigation services.

Statements of net position, statements of revenues, expenses and changes in net position, and statements of cash flows

The statements of net position include all of TID's assets, liabilities and deferred outflows and inflows using the accrual basis of accounting, as well as information about which assets can be utilized for general purposes, and which assets are restricted as a result of bond covenants and other commitments. The statements of revenues, expenses, and changes in net position report all of the revenues and expenses during the time periods indicated. The statements of cash flows report the cash provided and used by operating activities, as well as cash payments for debt service and capital expenditures and cash purchases and proceeds from investing activities during the time periods indicated.

Summary of Financial Position and Changes in Net Position as of and for the years ended December 31, 2020, 2019, and 2018:

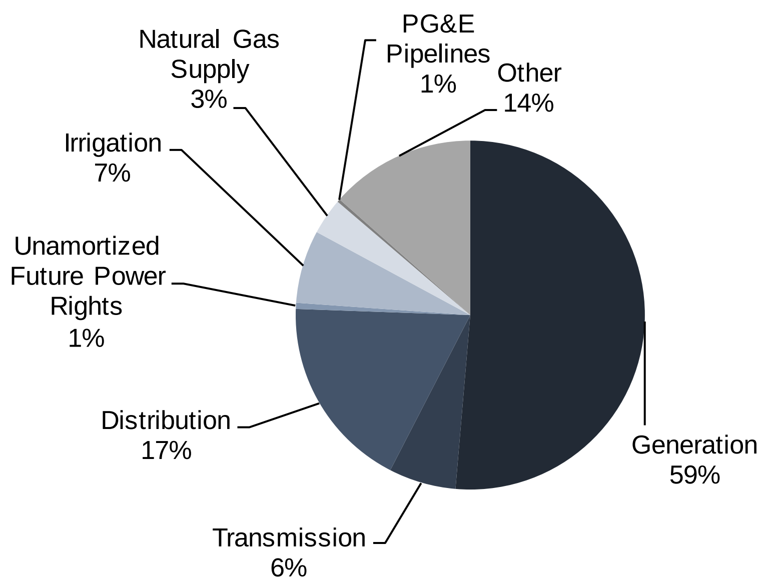
(dollars in thousands)	2020	2019	2018
ASSETS AND DEFERRED OUTFLOWS			
Utility plant, net	$ 1,189,219	$ 1,194,237	$ 1,211,957
Cash, cash equivalents, and investments	414,427	427,824	368,186
Other noncurrent assets	51,486	54,785	56,119
Other current assets	71,526	61,953	64,576
Deferred outflows of resources	73,988	76,554	95,226
Total assets and deferred outflows	$ 1,800,646	$ 1,815,353	$ 1,796,064
LIABILITIES, DEFERRED INFLOWS, AND NET POSITION			
Long-term debt	$ 1,010,567	$ 1,075,847	$ 1,035,224
Other noncurrent liabilities	44,116	46,759	79,318
Other current liabilities	93,943	107,860	167,297
Deferred inflows of resources	200,264	169,749	129,231
Total liabilities and deferred inflows	$ 1,348,890	$ 1,400,215	$ 1,411,070
NET POSITION	$ 451,756	$ 415,138	$ 384,994

(dollars in thousands)	2020	2019	2018
REVENUES, EXPENSES, AND CHANGES IN NET POSITION			
Operating revenues	$ 341,976	$ 342,967	$ 344,266
Operating expenses	(278,464)	(281,490)	(287,978)
Operating income	63,512	61,477	56,288
Nonoperating expense, net	(26,894)	(31,333)	(31,697)
Increase in net position	36,618	30,144	24,591
NET POSITION			
Beginning of year, as previously reported	415,138	384,994	370,558
Cumulative effect of accounting change (OPEB)	-	-	(10,155)
Beginning of year, as adjusted	415,138	384,994	360,403
End of year	$ 451,756	$ 415,138	$ 384,994

Management's Discussion and Analysis as of and for the Year Ended December 31, 2020:

Assets

Utility Plant – TID had approximately $1,189.2 million invested in utility plant assets, net of accumulated depreciation at December 31, 2020. TID transferred approximately $51.8 million of assets from construction in progress to utility plant in service in 2020 and had net disposals of $0.3 million. Net utility plant makes up 69% of TID's assets at December 31, 2020 and 2019.



During 2020, TID capitalized $60.6 million of additions to utility plant. TID invested $1.4 million in Walnut Energy Center Authority modifications and inspections, $12.9 million in relicensing fees related to Don Pedro Dam Hydroelectric facilities and upgrades, $6.0 million on routine expansion, $5.3 million on irrigation facilities, $8.6 million on emission credits, $7.2 million on T & D lines, $7.7 million on the development of a new customer information system and $9.0 million on underground lines, substation upgrades and general capital.

Cash, cash equivalents and investments

TID's cash, cash equivalents and investments decreased $13.4 million during 2019. This was primarily due to cash outflows from current year capital offset by current year operations.

Other noncurrent assets

Other noncurrent assets decreased $3.3 million during 2020. This decrease is primarily related to a decrease in regulatory assets of $3.6 million driven by current year amortization of pension costs and a decrease in other assets of $0.1 million offset by an increase in other postemployment benefits ("OPEB") asset of $0.4 million.

Other current assets

Other current assets increased $9.6 million during 2020. The increase was due primarily to an increase of $7.2 million in retail accounts receivable, an increase in accrued Interest and other receivables of $4.6 million and an increase in materials and supplies of $0.2 million offset by a decrease in prepaid expenses and other current assets of $1.9 million, a decrease in wholesale accounts receivable of $0.3 million, and a decrease of $0.2 million in receivable from the Transmission Agency of Northern California.

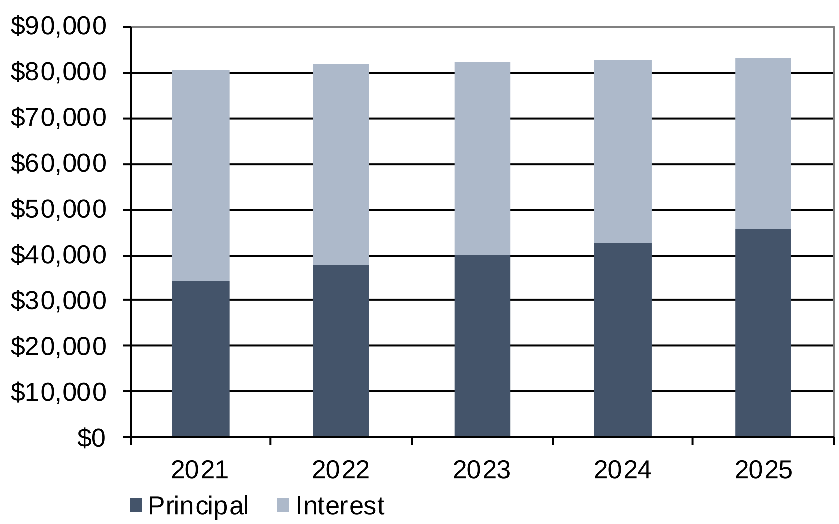
Deferred outflows of resources

Deferred outflows of resources decreased $2.6 million primarily due to current year amortization of $3.6 million in debt refunding losses, a decrease of $1.4 million in cash flow hedges and a net decrease in deferred ARO outflow of $0.7 million offset by an increase of deferred pension outflows of $2.5 million and an increase deferred OPEB outflows of $0.6 million.

Liabilities and changes in net position

Long-term debt – Long-term debt decreased $65.3 million primarily due to scheduled principal payments of $31.9 million, a debt refunding which resulted in a net long-term debt decrease of $16.0 million, and the amortization of debt premiums of $17.4 million.

The following table shows TID's future debt service requirements from 2021 through 2025 at December 31, 2020 (dollars in thousands):



At December 31, 2020, TID's bond ratings are A2 from Moody's, AA- from Fitch and AA- from Standard and Poor's.

Other noncurrent liabilities

Other noncurrent liabilities decreased $2.6 million in 2020. The decrease was primarily due to a decrease of $1.3 million in the net pension liability, decrease of $1.1 million in derivative financial instruments and a decrease of $0.4 million in TID's Pacific Gas & Electric (PG&E) pipeline obligations offset by an increase of $0.2 million in TID's asset retirement obligation.

Other current liabilities

Other current liabilities decreased $13.9 million in 2020. The decrease was due to a net decrease in commercial paper of $4.4 million, a net decrease in gas and power accounts payable and accrued expenses of $4.9 million, a decrease of interest payable of $2.5 million, a decrease in customer deposits and advances of $2.0 million, a decrease of $0.4 million in current portion of lease obligations and a decrease of $0.4 million in derivative financial instruments offset by an increase in accrued salaries, wages and related benefits of $0.7 million.

Deferred inflow of resources

Deferred inflow of resources increased $30.5 million due to an increase of $25.9 million in the power supply adjustment, a $4.1 million net increase in deferred debt refunding gain as a result of current year refunding, a net increase in deferred pension inflows of $1.5 million and $0.9 million increase in unrealized gain on investments offset by a decrease of $1.7 million in deferred auction sales and a decrease in deferred OPEB inflows of $0.2 million.

Changes in net position

Operating revenues

Operating revenues decreased $1.0 million from $343.0 million in 2019 to $342.0 million in 2020. Wholesale electric revenues decreased $7.9 million to $47.0 million in 2020 from $55.0 million in 2019, as a result of a decrease in volume sold offset by a small an increase in average sales price. Volumes decreased approximately 14.0% when compared to 2019 while average sales price increased approximately 6.2% from an average of $41/megawatt hours (MWh) in 2019 to $44/MWh in 2020. Wholesale gas revenues decreased $1.6 million primarily due to a decrease in sales volume. Electric retail power revenues were up $10.5 million primarily due to a deferral of $25.9 million, which reduced revenues in 2020 as a result of the power supply adjustment compared to a deferral of $30.2 million in 2019. The Board elected to utilize electric rate stabilization of $0 million in 2020 compared to $9.6 million in 2019 to fund capital projects. Consumption for 2020 was up approximately 5.8% when compared to 2019.

Operating expenses

Purchased power, generation and fuel expenses decreased $2.9 million to $141.2 million in 2020 compared to $144.1 million in 2019. The decrease is primarily due to a decrease in fuel related expense of $7.5 million offset by an increase in purchased power of $7.5 million. The remaining decrease is due to decreased maintenance cost at the District's generating facilities. Other electric expense decreased $0.4 million due to a reduction in competitive transition charges ("CTC") for 2020. Irrigation expense remained primarily flat with a small decrease $0.1 million. Administrative and general expenses increased $1.0 million when compared to 2019 primarily due to increased technology costs to accommodate employees for the California State at home order as the result of Covid-19. Depletion expense decreased $0.4 million as a result of current year production from TID's gas field investments. Depreciation and amortization expense decreased $0.1 million primarily due to new assets being placed into service offset by a decrease in amortization of emission allowances under the State's cap and trade program.

Net investment income

Net investment income in 2020 decreased $0.2 million when compared to 2019, primarily due to slightly lower yields on investments.

Other income

Other income in 2020 increased $0.1 million due primarily to a $0.7 million increase in contributions in aid of construction revenue and an increase of $0.1 million in property tax revenue offset by a decrease in late fees of $0.7 million.

Derivative gain

For the year ended December 31, 2020, TID had a net gain of $0.7 million compared to a net loss of $0.1 million for the year ended December 31, 2019, due to a change in the fair value of derivative instruments.

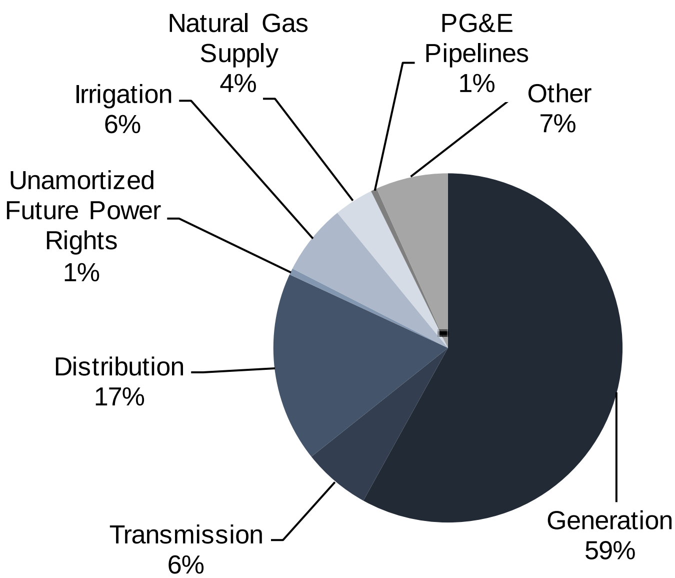
Interest expense

Interest expense decreased $3.8 million in 2020 as compared to 2019, primarily due to savings realized from the bond refunding executed in 2020 and a full year of savings from the bond refunding's executed in 2019.

Management's Discussion and Analysis as of and for the Year Ended December 31, 2019:

Assets

Utility Plant – TID had approximately $1,194.2 million invested in utility plant assets, net of accumulated depreciation at December 31, 2019. TID transferred approximately $26.6 million of assets from construction in progress to utility plant in service in 2019 and had net disposals of $0.2 million. Net utility plant makes up 69% of TID's assets at December 31, 2019, compared to 71% in the prior year.



During 2019, TID capitalized $48.3 million of additions to utility plant. TID invested $2.5 million in Walnut Energy Center Authority modifications and inspections, $7.2 million in relicensing fees related to Don Pedro Dam Hydroelectric facilities and upgrades, $4.8 million on routine expansion, $3.9 million on irrigation facilities, $3.1 million on emission credits, $7.2 million on T & D lines, $2.8 million on property acquisition and improvements, $8.1 million on the development of a new customer information system and $8.6 million on underground lines, substation upgrades and general capital.

Cash, cash equivalents and investments

TID's cash, cash equivalents and investments increased $59.6 million during 2019. This was primarily due to cash inflows from current year operations.

Other noncurrent assets

Other noncurrent assets decreased $1.3 million during 2019. This decrease is primarily related to a decrease in regulatory assets of $3.9 million driven by current year amortization of pension costs and a decrease in unrealized loss on investments offset by an increase in other postemployment benefits ("OPEB") asset of $2.7 million.

Other current assets

Other current assets decreased $2.6 million during 2019. The decrease was due primarily to a decrease in wholesale accounts receivable of $2.7 million, a decrease in prepaid expenses and other current assets of $1.4 million, a decrease of $1.0 million in retail accounts receivable, and a decrease in derivative financial instruments of $0.4 million offset by an increase of $1.6 million in receivable from the Transmission Agency of Northern California, an increase in accrued Interest and other receivables of $0.6 million and an increase in materials and supplies of $0.5 million.

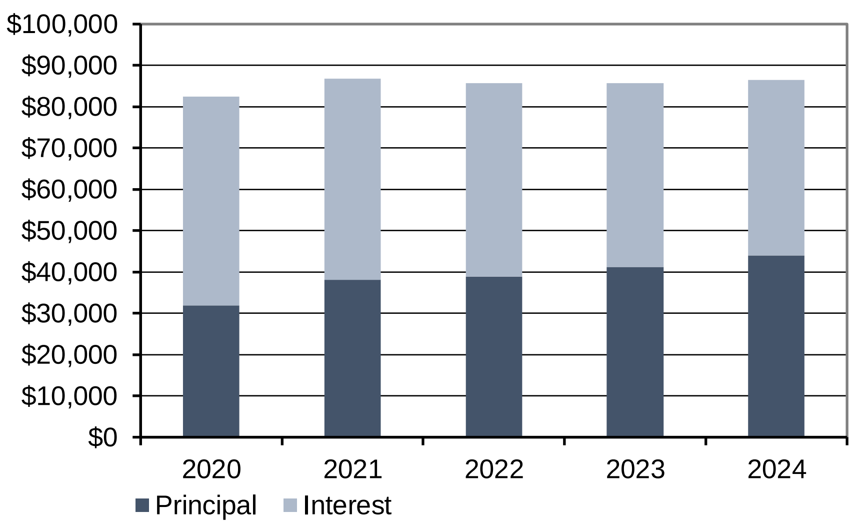
Deferred outflows of resources

Deferred outflows of resources decreased $18.6 million primarily due to a net decrease of deferred pension outflows of $15.4 million, current year amortization of $4.2 million in debt refunding losses and amortization of deferred ARO outflow of $0.9 million, an increase of $1.4 million in cash flow hedges and an increase deferred OPEB outflows of $0.5 million.

Liabilities and changes in net position

Long-term debt – Long-term debt increased $40.6 million as a result of a debt refunding which resulted in a net long-term debt increase of $85.2 offset by scheduled principal payments of $34.6 million and the amortization of debt premiums of $10.0 million.

The following table shows TID's future debt service requirements from 2020 through 2024 at December 31, 2019 (dollars in thousands):



At December 31, 2019, TID's bond ratings are A2 from Moody's, AA- from Fitch and AA- from Standard and Poor's.

Other noncurrent liabilities

Other noncurrent liabilities decreased $32.5 million in 2019. The decrease was primarily due to a decrease of $33.3 million in the net pension liability, a decrease of $0.4 million in TID's Pacific Gas & Electric (PG&E) pipeline obligations offset by an increase of $1.2 million in derivative financial instruments.

Other current liabilities

Other current liabilities decreased $59.4 million in 2019. The decrease was due to a net decrease in commercial paper of $65.9 million and a decrease of interest payable of $2.0 million, offset by an increase in customer deposits and advances of $4.7 million, a net increase in gas and power accounts payable and accrued expenses of $3.2 million, an increase in accrued salaries, wages and related benefits of $0.2 million and an increase of $0.3 million in derivative financial instruments.

Deferred inflow of resources

Deferred inflow of resources increased $40.5 million due to an increase of $30.2 million in the power supply adjustment, a net increase in deferred pension inflows of $19.9 million, an increase in deferred OPEB inflows of $2.1 million, an increase of $1.8 million in unrealized gain on investment and a $0.5 million net increase in deferred debt refunding gain as a result of current year refunding offset by a decrease of $9.6 million in the electric rate stabilization, a decrease of $3.9 million in deferred auction sales and a decrease in cash flow hedges of $0.5 million.

Changes in net position

Operating revenues

Operating revenues decreased $1.3 million from $344.3 million in 2018 to $343.0 million in 2019. Wholesale electric revenues increased $1.5 million to $55.0 million in 2019 from $53.5 million in 2018, as a result of an increase in average sales price and a decrease in volume sold. Volumes decreased approximately 0.5% when compared to 2018 while average sales price increased approximately 1.9% from an average of $40/megawatt hours (MWh) in 2018 to $41/MWh in 2019. Wholesale gas revenues decreased $0.7 million primarily due to a decrease in sales volume. Electric retail power revenues were down $4.1 million primarily to a deferral of $30.2 million which reduced revenues in 2019 as a result of the power supply adjustment compared to a deferral of $23.4 million in 2018. The Board elected to utilize electric rate stabilization of $9.6 million in 2019 compared to $7.5 million in 2018 to fund capital projects. Consumption remained flat when comparing 2019 to 2018.

Operating expenses

Purchased power, generation and fuel expenses decreased $6.2 million to $144.1 million in 2019 compared to $150.3 million in 2018. The decrease is primarily due to a decrease in purchased power of $4.2 million, a small decrease in fuel expense of $0.2 million and remaining decrease is due to decreased maintenance cost at the District's generating facilities. Other electric expense decreased $2.0 million due to decreased distribution maintenance expense. Irrigation expense decreased $0.2 million primarily due to a decrease in water delivery expenses of $0.4 million offset by an increase in maintenance cost of $0.2 million. Administrative and general expenses increased $1.1 million when compared to 2018 primarily due to increased labor and benefit costs. Depletion expense decreased $0.2 million as a result of current year production from TID's gas field investments. Depreciation and amortization expense increased $0.8 million primarily due to new assets being placed into service offset by a decrease in amortization of emission allowances under the State's cap and trade program.

Net investment income

Net investment income in 2019 increased $2.8 million when compared to 2018, primarily due to higher yields on investments.

Other income

Other income decreased $3.8 million primarily as result of one time transactions that happened in 2018. In 2018 $2.4 million in net insurance proceeds were realized as a result of a fire from a previous year and $1.6 million related to reimbursement from FEMA for costs incurred with increased river flows from 2017 were recognized in 2018. The remaining change is due to an increase of $0.2 million in property tax revenue.

Derivative gain

For the year ended December 31, 2019, TID had a net loss of $0.1 million compared to a net gain of $0.1 million for the year ended December 31, 2018, due to a change in the fair value of derivative instruments.

Interest expense

Interest expense decreased $1.5 million in 2019 as compared to 2018, primarily due to savings realized from the bond refunding's executed in 2019.

Turlock Irrigation District
Consolidated Statements of Net Position
December 31, 2020 and 2019

(dollars in thousands)	2020	2019
ASSETS		
Utility plant, net	$ 1,189,219	$ 1,194,237
Investments and other long-term assets		
Cash and cash equivalents, restricted for long-term purposes	2,522	22,628
Short-term investments, restricted for long-term purposes	15,017	19,223
Long-term investments, including restricted amounts	172,239	157,179
Regulatory assets	47,019	50,597
Net OPEB asset	3,910	3,504
Other assets	557	684
	241,264	253,815
CURRENT ASSETS		
Cash and cash equivalents, including restricted amounts	219,790	224,335
Short-term investments, including restricted amounts	4,859	4,459
Retail accounts receivable, net	28,486	21,256
Wholesale accounts receivable, net	3,634	3,904
Accrued interest and other receivables	18,127	13,484
Materials and supplies, net	4,379	4,175
Prepaid expenses and other current assets	2,575	4,462
Affiliate receivable	14,169	14,386
Derivative financial instruments	156	286
	296,175	290,747
Total assets	1,726,658	1,738,799
DEFERRED OUTFLOWS OF RESOURCES		
Deferred refunding loss	10,859	14,407
Cash flow hedges	4,418	5,847
Deferred OPEB outflows	2,032	1,424
Deferred ARO outflows	10,018	10,703
Deferred pension outflows	46,661	44,173
	73,988	76,554
Total assets and deferred outflows	$ 1,800,646	$ 1,815,353

See accompanying notes.

Turlock Irrigation District
Consolidated Statements of Net Position
December 31, 2020 and 2019

(dollars in thousands)	2020	2019
LIABILITIES		
Liabilities		
Long-term debt, net of current portion	$ 976,247	$ 1,043,962
Asset retirement obligation	14,580	14,430
Long-term lease obligations	-	410
Net pension liability	25,797	27,129
Derivative financial instruments, net of current portion	3,739	4,790
	1,020,363	1,090,721
Current liabilities		
Commercial paper	29,496	33,878
Current portion of long-term debt	34,320	31,885
Power purchases and gas payables	8,580	10,021
Accounts payable and accrued expenses	11,164	14,584
Accrued salaries, wages, and related benefits	8,612	7,871
Customer deposits and advances	13,851	15,883
Accrued interest payable	21,559	24,106
Current portion of lease obligations	-	387
Derivative financial instruments	681	1,130
	128,263	139,745
Total liabilities	1,148,626	1,230,466
DEFERRED INFLOWS OF RESOURCES		
Deferred refunding gain	7,225	3,083
Cash flow hedges	156	86
Deferred OPEB inflows	1,825	2,090
Deferred pension inflows	37,759	36,243
Regulatory credits	153,299	128,247
	200,264	169,749
NET POSITION		
Net investment in capital assets	178,653	141,089
Restricted	58,567	34,010
Unrestricted	214,536	240,039
Total net position	451,756	415,138
Total liabilities, deferred inflows, and net position	$ 1,800,646	$ 1,815,353

Turlock Irrigation District
Consolidated Statements of Revenues, Expenses, and Changes in Net Position
Years ended December 31, 2020 and 2019

(dollars in thousands)	2020	2019
OPERATING REVENUES		
Electric		
Retail	$ 275,323	$ 264,836
Wholesale	47,052	54,980
Irrigation	13,213	13,314
Wholesale gas	2,005	3,600
Other	4,383	6,237
	341,976	342,967
OPERATING EXPENSES		
Purchased power	58,027	50,537
Generation and fuel	83,200	93,607
Other electric	30,326	30,740
Irrigation	13,996	14,126
Administration and general	27,639	26,687
Depreciation and amortization	65,276	65,793
	278,464	281,490
Operating income	63,512	61,477
NONOPERATING REVENUES AND EXPENSES		
Net investment income	6,534	6,750
Other income, net	10,407	10,278
Derivative gain (loss)	709	(27)
Interest expense	(44,544)	(48,334)
	(26,894)	(31,333)
Increase in net position	36,618	30,144
NET POSITION		
Beginning of year	415,138	384,994
End of year	$ 451,756	$ 415,138

See accompanying notes.

(dollars in thousands)	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from electric customers	$ 293,381	$ 286,943
Receipts from wholesale power sales	47,322	57,696
Receipts from irrigation customers	13,250	13,300
Receipts from sales of gas	2,162	3,727
Payments to vendors for purchased power	(56,822)	(50,073)
Payments to employees and vendors for generation and fuel and other electric	(112,076)	(121,891)
Payments to employees and vendors for irrigation	(14,302)	(14,299)
Payments to employees and vendors for administration and general	(25,598)	(21,992)
Other receipts and payments, net	(1,624)	4,647
Net cash provided by operating activities	145,693	158,058
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(62,889)	(42,989)
Proceeds from contributions in aid of construction	2,846	2,158
Proceeds from issuance of long-term debt	163,263	194,052
Repayment of long-term debt	(215,699)	(143,733)
Repayment of long-term lease obligations	(797)	(364)
Repayment of commercial paper	(4,382)	(104,443)
Proceeds from issuance of commercial paper	-	38,557
Interest payments on debt	(53,664)	(54,311)
Interest payments on long-term lease obligations	-	(60)
Build America Bond receipts	3,458	3,449
Net cash used in capital and related financing activities	(167,864)	(107,684)
CASH FLOWS FROM INVESTING ACTIVITIES		
Investment income	7,349	6,260
Derivative gain	837	(26)
Purchases of investments	(148,481)	(132,538)
Sales of investments	137,815	150,060
Net cash (used in) provided by investing activities	(2,480)	23,756
Net (decrease) increase in cash and cash equivalents	(24,651)	74,130
CASH AND CASH EQUIVALENTS		
Beginning of year	246,963	172,833
End of year	$ 222,312	$ 246,963
RECONCILIATION OF CASH AND EQUIVALENTS TO BALANCE SHEET		
Cash and cash equivalents restricted for long-term purposes	$ 2,522	$ 22,628
Cash and cash equivalents, including restricted amounts	219,790	224,335
	$ 222,312	$ 246,963

See accompanying notes.

Turlock Irrigation District
Consolidated Statements of Cash Flows
December 31, 2020 and 2019

(dollars in thousands)	2020	2019
ADJUSTMENT TO RECONCILE OPERATING INCOME TO NET CASH PROVIDED BY OPERATIONS		
Operating income	$ 63,512	$ 61,477
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation and amortization	65,276	65,793
Other income	4,435	4,951
Other changes in operating assets and liabilities:		
Accounts receivable	(12,155)	3,505
Materials and supplies	(204)	(510)
Prepaid expenses and other current assets	2,014	1,480
Regulatory assets and credits	27,814	19,847
Deferred OPEB outflows	(608)	(452)
Deferred pension inflows	1,516	19,903
Deferred ARO outflow	835	823
Net OPEB asset	(406)	(2,691)
Power purchases and gas payables	(1,441)	(1,093)
Accounts payable and accrued expenses	(1,122)	(965)
Accrued salaries, wages, and related benefits	741	225
Customer deposits and advances	(646)	3,273
Affiliate receivable	217	(1,615)
Deferred OPEB inflows	(265)	2,070
Deferred pension outflows	(2,488)	15,397
Net pension liability	(1,332)	(33,360)
Net cash provided by operating activities	$ 145,693	$ 158,058
SUPPLEMENTAL NONCASH INVESTING AND FINANCING ACTIVITIES		
Accounts payable and other liabilities related to construction of capital assets	$ 5,247	$ 7,556
Investment (loss)gain from derivatives	$ (128)	$ 53
Deferred refunding gain	$ 4,540	$ 779

See accompanying notes.

Turlock Irrigation District
Statements of Fiduciary Net Position of the Retirement Plan
June 30, 2020 and 2019

(dollars in thousands)	June 30, 2020	June 30, 2019
ASSETS		
Cash and cash equivalents	$ 10,296	$ 19,545
Receivables		
Interest	471	539
Dividends	103	133
Total receivables	574	672
Investments, at fair value (Note 11)		
U.S. Government and municipal obligations	22,768	25,851
International obligations	1,557	1,249
Domestic stocks and mutual funds	154,745	148,994
International stocks and mutual funds	84,768	82,153
Domestic fixed income securities	40,028	39,363
Other investments	13,728	12,160
Total investments	317,594	309,770
Total assets	$ 328,464	$ 329,987
LIABILITIES		
Accrued expenses	$ 213	$ 212
Fiduciary net position restricted for pensions	$ 328,251	$ 329,775

See accompanying notes.

Turlock Irrigation District
Statements of Changes in Fiduciary Net Position of the Retirement Plan
For the 12-months Ending June 30, 2020 and 2019

(dollars in thousands)	June 30, 2020	June 30, 2019
ADDITIONS		
Contributions		
Employer	$ 13,404	$ 13,610
Participants	1,875	1,670
Total contributions	15,279	15,280
Investment income		
Net (depreciation) appreciation in fair value of investments (Note 11)	(4,667)	4,087
Interest income	2,497	2,495
Dividend income	5,812	4,710
Other investment income	64	110
Investment expense	(772)	(764)
Net investment income	2,934	10,638
Total additions	18,213	25,918
DEDUCTIONS		
Benefits paid to participants and beneficiaries	19,222	17,537
Refunds of contributions	122	1,017
Administrative expenses	393	422
Total deductions	19,737	18,976
NET INCREASE IN FIDUCIARY NET POSITION	(1,524)	6,942
FIDUCIARY NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	329,775	322,833
End of year	$ 328,251	$ 329,775

See accompanying notes.

Note 1 – Organization, Description of Business

The Turlock Irrigation District (TID or the District) was organized under the Wright Act in 1887 and operates under the provisions of the California Water Code as a special district of the State of California (the State). As a public power utility, TID is not subject to regulation or oversight by the California Public Utilities Commission (CPUC). TID provides electric power and irrigation water to its customers.

TID's Board of Directors (the Board) determines its rates and charges for its commodities and services. TID levies ad valorem property taxes on property located in the counties of Stanislaus and Merced. TID may also incur indebtedness, including issuing bonds, and is exempt from payment of federal and state income taxes.

Note 2 – Summary of Significant Accounting Policies

Method of accounting
TID maintains its accounts in accordance with accounting principles generally accepted in the United States of America (GAAP) for proprietary funds as prescribed by the Governmental Accounting Standards Board (GASB). TID is accounted for as an enterprise fund and is financed and operated in a manner similar to that of a private business enterprise. TID 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. TID's accounting records generally follow the Uniform System of Accounts for public utilities and licensees prescribed by the Federal Energy Regulatory Commission (FERC), except as it relates to the accounting for contributions in aid of construction (CIAC).

TID provides energy for residential, commercial, and industrial use and provides irrigation water for agricultural use. Accordingly, TID defines operating revenues as sales of energy, wholesale sales of energy and natural gas, irrigation sales, and other miscellaneous energy and irrigation service revenues. Operating expenses include the costs of sales and services, administration expenses, depreciation, depletion and amortization. Nonoperating revenue and expense typically includes interest income on investments, interest expense, and other miscellaneous items.

Component units
The Walnut Energy Center Authority (WECA) owns and operates a 250 MW natural gas fueled generation facility, which commenced commercial operations in 2006. The Tuolumne Wind Project Authority (TWPA) owns a membership interest in a 136.6 MW wind farm, consisting of 62 wind-turbine generators located in Klickitat County, Washington. WECA and TWPA have no employees and all the output from both facilities is sold to TID through power purchase agreements.

Although WECA and TWPA are separate legal entities from TID, they are consolidated component units of TID and reported as part of TID because of the extent of their operational and financial relationship with TID which includes majority oversight from the same Board of Directors.

Note 2 – Summary of Significant Accounting Policies (continued)

Accordingly, all operations of WECA and TWPA are consolidated into TID's financial statements as blended component units. Internal transactions, including revenues and expenses between the District's component units and the District, have been eliminated in the accompanying financial statements in accordance with GAAP. Copies of the WECA and TWPA stand-alone annual financial report may be obtained from TID's executive office at 333 East Canal Drive, Turlock, California 95381.

Fiduciary Fund
TID has a fiduciary responsibility for a defined benefit pension plan, the Amended and Restated Retirement Plan for Employees and Elective Officer of Turlock Irrigation District (the "Retirement Plan"). The financial activities of the Retirement Plan are included in the financial statements as a Statements of Fiduciary Net Position of the Retirement Plan and Statements Changes in Fiduciary Net Position of the Retirement Plan as of June 30, 2020 and 2019, the Retirement Plans fiscal year end.

Use of estimates
The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the 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 differ from those estimates. TID's more significant estimates include fair value estimates for investments; estimated useful lives of utility plant; total pension liability; total other postemployment benefits liability; depletion; and workers' compensation reserves.

Long-term and short-term debt
Long-term debt is recorded at the principal amount of the obligations adjusted for original issue discounts and premiums. The premiums and discounts on bonds issued are amortized over the terms of the bonds using the effective interest method and recorded as a component of interest expense.

Deferred refunding gain or loss
Debt defeasance charges result from debt refunding transactions and comprise the difference between the reacquisition costs and the net outstanding debt balances including deferred costs of the defeased debt at the date of the defeasance transaction. Such charges are included as a component of deferred outflows or deferred inflows and amortized into interest expense over the shorter of the life of the refunded debt or the new debt, using the effective interest method.

Utility plant
Utility plant is recorded at cost. Capital assets are generally defined by TID as assets with an initial, individual cost of more than $5 and an estimated useful life in excess of one year. The cost of additions, renewals and betterments are capitalized; repairs and minor replacements are charged to operating expenses as incurred. Interest cost incurred before the end of a construction period is recognized as an expense in the period in which the cost is incurred in compliance with GASB Statement No. 89, *Accounting for Interest Cost Incurred before the end of a Construction Period*. TID incurred gross interest costs of $44,544 and $48,334 during the years ended December 31, 2020 and 2019, respectively.

Note 2 – Summary of Significant Accounting Policies (continued)

Depreciation is computed using the straight-line method over the estimated useful lives, which generally range from 20 to 40 years and 40 to 150 years for electric and irrigation related assets, respectively. The estimated useful lives of furniture, fixtures, equipment and other assets range from 5 to 25 years. Upon retirement of an asset that was previously in service, the cost of depreciable utility plant, plus removal costs, less salvage, is charged to accumulated depreciation. If a capital asset is disposed of prior to being put into service, the costs capitalized to date are expensed. In addition, during the years ended December 31, 2020 and 2019, TID had net loss totaling $333 and $186, respectively, from retirements and disposals that were previously classified as utility plant.

Future power rights are costs incurred by TID in development of hydroelectric facilities owned by others who provide power to TID. Such costs are recorded as a component of utility plant and are amortized on a straight-line basis over the 49-year periods to which these rights apply.

Impairment of long-lived assets
TID accounts for potential impairments in accordance with GASB Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*, under which TID evaluates prominent events or changes in circumstances affecting capital assets to determine whether impairment of a capital asset has occurred. A capital asset is considered impaired when its service utility has declined significantly and unexpectedly and when full recovery through utility rates or other means is not considered probable. There were no material impairments of long-lived assets recorded during fiscal 2020 and 2019.

Intangible assets
TID accounts for intangible assets in accordance with GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, which provides guidance regarding how to identify, account for and report intangible assets. Intangible assets are defined as assets that lack physical substance, are nonfinancial in nature, and have an initial useful life extending beyond a single reporting period. GASB 51 provides that intangible assets be classified as capital assets, except for items explicitly excluded from the scope of the standard.

Included in nondepreciable utility plant are costs related to emission credits acquired that are necessary to operate gas fired facilities. Such credits have an indeterminate life and are therefore, not amortized.

TID is subject to the requirements under the State's cap and trade program and has purchased emission credits though the State's auction program. The cost of the emission allowances purchased is included in depreciable utility plant. Entities subject to the cap and trade program surrender allowances and offsets equal to their emissions at the end of each compliance period; therefore, TID is amortizing the purchased emission allowances based on District emissions as incurred for wholesale power sales and the amortization expense is included as a component of depreciation expense on the statement of revenues, expenses and changes in net position.

Amortization expense totaled $3,425 and $3,989 for the years ended December 31, 2020 and 2019, respectively.

Note 2 – Summary of Significant Accounting Policies (continued)

Investments in gas properties

TID owns nonoperating ownership interests in gas producing properties in Wyoming and Texas. TID uses the successful efforts method of accounting for its investments in these gas producing properties. The costs of the investment along with costs to drill and complete wells that access economically recoverable reserves are capitalized as a component of utility plant on the statement of net position. Costs to drill wells that do not find economically recoverable reserves are expensed. The capitalized costs of producing gas properties, after considering estimated residual salvage values, are depleted by the unit-of-production method based on the estimated future production of proved reserves for the properties. If prominent events or changes in circumstances are identified, the investments in gas properties are evaluated for impairment. No impairment has been recorded to date.

Gas production from TID's share of these properties is sold to wholesale buyers as an economic hedge to offset the net cost of TID's gas supply. Sales of gas in 2020 and 2019 totaled $2,005 and $3,600, respectively. Depletion expense, which is included as a component of depreciation and amortization expense in the accompanying statement of revenues, expenses and changes in net position, totaled $3,835 and $4,256 for the years ended December 31, 2020 and 2019, respectively.

Cash and cash equivalents

Cash equivalents include all debt instruments with original maturity dates of three months or less from the date of purchase, all investments in the California Asset Management Program (CAMP) and the Local Agency Investment Fund (LAIF). The debt instruments are reported at amortized cost which approximates fair value. The investments in CAMP and LAIF are reported at their net asset value, which approximates fair value. CAMP is a joint powers authority (JPA), a public agency whose investments are limited to those permitted by the California Government Code. TID is invested in CAMP's California Asset Management Trust Cash Reserve Portfolio which is a short-term money market portfolio. Investments in CAMP shares are not insured by the Federal Deposit Insurance Corporation (FDIC) or any other governmental agency. LAIF has an equity interest in the State of California Pooled Money Investment Account (PMIA). PMIA funds are on deposit with the State's Centralized Treasury System and are managed in compliance with the California Government Code, according to a statement of investment policy which sets forth permitted investment vehicles, liquidity parameters and maximum maturity of investments. The PMIA cash and investments are recorded at cost which approximates fair value. TID's deposits with CAMP and LAIF are available for withdrawal generally on demand. TID has an automated investment account where at the end of the business day funds are automatically swept overnight to purchase shares in a money market mutual fund from TID's primary bank and the primary bank automatically redeems the shares the next day. TID receives monthly interest based on the dividend rate of the money market mutual fund.

Investments

Investments are reported at their fair market value, in accordance with GASB issued Statement No. 72, *Fair Value Measurement and Application*. Premiums and discounts on investments are amortized using the effective interest rate method. TID defers unrealized holding gains and losses on its investments until such investments mature or are sold which is consistent with TID's rate setting process. Realized gains and losses are included in net investment income in the accompanying statement of revenues, expenses and changes in net position.

Note 2 – Summary of Significant Accounting Policies (continued)

In accordance with provisions of the credit agreements relating to TID's long-term debt obligations, restricted funds held by trustees have been established to provide for certain debt service and project funding requirements. The restricted funds held by trustees are invested primarily in United States (U.S.) government securities and related instruments with maturities no later than the expected date of the use of such funds.

Participation in joint power authorities
TID's ownership investments in JPAs are accounted for using the cost method except for the WECA and TWPA which are consolidated into TID's financial statements.

Accounts receivable and allowance for doubtful accounts
Accounts receivable arise from billings to customers for the sale of power and water, and certain improvements made to customers' properties. Accounts receivable also includes an estimate for unbilled retail and wholesale revenues related to power delivered between the last billing date and the last day of the reporting period.

TID recognizes an estimate of uncollectible accounts for its retail and wholesale receivables based upon its historical experience with collections, current market conditions and specific identification of known losses. At December 31, 2020 and 2019, the allowance for doubtful accounts totaled $1,095 and $401, respectively. TID records bad debt expense as a reduction of revenue in the statements of revenues, expenses and changes in net position. In 2020 and 2019, net bad debt expense was $734 and $203, respectively.

Materials and supplies
Materials and supplies are used in TID's operations and are recorded at average cost, net of reserves for obsolete items. Reserves for obsolete items totaled $450 at December 31, 2020 and 2019, respectively.

Long-term lease obligations
In connection with completing the Walnut Energy Center and the Almond 2 power plant, TID entered into long-term transmission arrangements with Pacific Gas and Electric (PG&E) which included PG&E constructing new, and reinforcing existing natural gas transmission facilities. The arrangements represent, in substance, capital leases wherein TID (lessee) is obligated to repay all costs associated with the construction and reinforcement of the transmission facilities to PG&E through billings on transmission usage. In accordance with GASB accounting rules governing lease accounting, TID records its obligations to PG&E as long-term lease obligations and the associated assets in utility plant. At inception, the contracts required up-front payments totaling $23,720 plus irrevocable payment obligations which totaled $44,087 on a net present value basis to be paid over ten year periods. Amounts due within one year are classified as current.

Note 2 – Summary of Significant Accounting Policies (continued)

The lease obligations are included in TID's statements of net position at December 31, 2020 and 2019 with a balance of $0 and $797, respectively, along with the related assets with a net book value of $3,329 and $6,657, respectively, in utility plant. Assets are recorded at the total cost to be paid over the lease term and are depreciated over the life of the lease on a straight line basis. Depreciation expense is included as a component of depreciation and amortization expense in the accompanying statement of revenues, expenses and changes in net position.

Regulatory assets and credits
TID's Board has the authority to establish the level of rates charged for all District services. As a regulated entity, TID's financial statements are prepared in accordance with GASB accounting rules governing regulatory accounting, which require the effects of the rate making process to be recorded in the financial statements. Accordingly, certain expenses and revenues, normally reflected in operations as incurred, are recognized when included in rates and recovered from or refunded to customers as set forth in rate actions taken by the Board.

Public benefit
To comply with state mandated legislation, TID's Board has specified a component of its rates, 2.85%, to be committed to public benefit expenditures. Public benefit expenditures consist of noncapital and capital expenditures for energy efficiency programs and renewable energy resources.

Compensated absences
TID accrues vacation leave, sick leave and other compensated absences earned as liabilities when the employees earn the benefits. At December 31, 2020 and 2019, the total estimated liability for vacation, sick, and other compensated absences was $6,353 and $5,654, respectively, and is included in accrued salaries, wages and related benefits in the accompanying statements of net position.

Self-insurance liability
Substantially all of TID's assets are insured against possible losses from fire and other risks. TID carries insurance coverage to cover general liability claims in excess of $1,000 per occurrence up to $35,000 and workers' compensation claims in excess of $750 per occurrence. TID records liabilities for unpaid claims when they are probable of occurrence and the amount can be reasonably estimated.

TID purchases its excess workers' compensation insurance from the California State Association of Counties (CSAC) Excess Insurance Authority. The risk of loss in excess of $750 per occurrence is transferred to the insurance pool.

The accompanying financial statements include accrued expenses for general liability, workers' compensation and medical, dental and vision claims based on TID's best estimates of the ultimate cost of settling outstanding claims and claims incurred, but not reported. At December 31, 2020 and 2019, TID's estimated self-insurance liability for its workers' compensation claims totaled $2,071 and $2,217, respectively, and is reported as a component of accounts payable and accrued expenses in the statements of net position.

Note 2 – Summary of Significant Accounting Policies (continued)

TID is a member of CSAC's Excess Insurance Authority Health program, which administers TID's self-insurance for employee health. CSAC's purpose is to pool the risk of its members to develop and fund programs of excess insurance for its members. Members fund the program through annual premiums developed by the CSAC Board with assistance from actuary and risk management consultants. Should actual losses among pool participants be greater than funds for the program, TID would be assessed its pro-rata share of the deficiency. No such losses have occurred and no additional liability has been accrued by TID.

Gas price swap and option agreements
TID uses forward purchase agreements, swaps and option agreements to hedge the impact of market volatility on gas prices for its gas fueled power plants. Such agreements are treated as derivative financial instruments as defined below. Expenses under the contracts, net of the payments received, are reported as generation and fuel expense, in the period in which the underlying gas and power deliveries occur.

Derivative financial instruments
TID accounts for derivative instruments in accordance with GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* (GASB 53), which establishes accounting and financial reporting standards for the recognition, measurement, and disclosure of information regarding derivative instruments entered into by state and local governments (Note 9).

TID records derivative financial instruments, consisting of gas price swap agreements, option agreements, and gas and electricity purchase and sales agreements that are not treated as normal purchases and normal sales, at fair value on its statements of net position. Normal purchases and sales contracts are for the purchase or sale of a commodity, such as natural gas or electricity, to be used in the normal course of operations, provided that it is probable TID will take or make delivery of the commodity specified in the derivative instrument. Changes in the fair value of derivatives that do not meet the requirements of an effective hedge transaction are included in nonoperating revenues and expenses as a derivative gain (loss). Changes in the fair value of derivatives which are effective hedges are deferred on the statements of net position.

The fair values of gas and electricity purchase and sales agreements are based on forward prices, established from published indexes from applicable regions and discounted using established interest rate indexes, where applicable, and information obtained from a pricing service where a published index is not available.

TID reports derivative financial instruments with remaining maturities of one year or less and the portion of long-term contracts with scheduled transactions over the next twelve months as current on the statements of net position. TID is exposed to risk of nonperformance if the counterparties default or if the agreements are terminated. TID monitors these risks and does not anticipate nonperformance.

Note 2 – Summary of Significant Accounting Policies (continued)

Pension plan
TID has a single-employer group defined benefit pension plan (the "Retirement Plan") which provides retirement benefits covering substantially all of its employees who have completed one year of continuous service. TID accounts for the Retirement Plan in accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, an amendment to GASB Statement No. 27, as amended by GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date* (GASB 68). This statement establishes standards for measuring and recognizing liabilities, deferred outflows and deferred inflows of resources, and expenses. For defined benefit plans, this statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service.

Other Post-Employment Benefits
TID provides post-retirement medical benefits in accordance with TID policy to qualified retirees and their spouses through TID's Employee Health Care Plan (the "Health Plan") until the retiree and participating spouse reach age 65. In 2018, TID adopted GASB Statement No. 75*, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75). The primary objective of GASB 75 is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). For defined benefit OPEB, GASB 75 identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. TID considers post-employment healthcare benefits to be OPEB costs.

TID's OPEB liability(asset) at January 1, 2020 is based upon a valuation date of June 30, 2019.

Net position
TID classifies its net position into three components – net investment in capital assets; restricted; and unrestricted. These classifications are defined as follows:

Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation reduced by the outstanding debt balances, net of deferred inflows and outflows of resources that are attributable to the acquisition, construction or improvement of those assets or related debt.

Restricted – This component of net position consists of assets with external constraints placed on their use. Constraints include those imposed by debt indentures, grants or laws and regulations of other governments, by law through constitutional provisions or enabling legislation.

Unrestricted – This component of net position consists of net amount of assets, deferred outflows of resources, liabilities, and deferred inflows that do not meet the definition of restricted or net investment in capital assets.

(dollars in thousands)

Note 2 – Summary of Significant Accounting Policies (continued)

Board designated net position

Net position includes amounts that TID's Board designates as reserves for debt service, capital improvements and rate stabilization. The rate stabilization fund represents amounts reserved for the purpose of stabilizing electric utility rates in future periods. The Board determines the annual transfers into and out of these reserves. While the Board designates these funds as reserve funds, they are not restricted and the Board can utilize such funds for any purpose.

The designated funds included in unrestricted net position were as follows at December 31:

	2020	2019
Rate stabilization	$ 34,076	$ 34,076
Capital improvements	7,791	7,791
	$ 41,867	$ 41,867

Purchased power expenses

A portion of TID's power needs are provided by power purchase agreements. Expenses from such agreements, along with associated transmission costs paid to other utilities, are charged to purchased power expense in the period the power was received. Adjustments to prior billings are included in purchased power expense once the payments or adjustments can be reasonably estimated. Gains or losses on power purchase and sale transactions that are settled without physical delivery are recorded as net additions or reductions to purchased power expense.

Additionally, any changes in the power supply adjustment (Note 9) balance, resulting in a regulatory asset increasing or decreasing are recorded as additions or reductions to purchased power expense and any changes resulting in a regulatory credit increasing or decreasing are recorded as additions or reductions to retail revenues. When the power supply adjustment balance changes from a regulatory credit to a regulatory asset or from a regulatory asset to a regulatory credit from one year to the next, a change to both purchased power expense and a change to retail revenues will be reflected in the statement of revenues, expenses and changes in net position. For the year ended December 31, 2020, the power supply adjustment balance increased resulting in a decrease to retail revenues of $25,935, and for the year ended December 31, 2019, the power supply adjustment balance increased resulting in a decrease to retail revenues of $30,235.

Contributions in aid of construction (CIAC) and grants

TID receives CIAC for customer contributions relating to expansions to TID's distribution facilities. TID also receives grant proceeds from federal and state assisted programs for its river restoration programs and other programs. The contributions and grant proceeds are included in other income in the statement of revenues, expenses and changes in net position. When applicable, these programs may be subject to financial and compliance audits pursuant to regulatory requirements. TID considers the possibility of any material grant disallowances to be remote.

Note 2 – Summary of Significant Accounting Policies (continued)

Asset retirement obligations
TID records asset retirement obligations (AROs) where there is a legally enforceable liability associated with the retirement of tangible capital assets. An ARO is measured based on the best estimate of the current value of outlays expected to be incurred. The current value is adjusted annually for the effects of general inflation or deflation. All relevant factors are evaluated at least annually to determine whether there is a significant change in the estimate outlays and whether to remeasure the ARO. The deferred outflows of resources are reduced and recognized as outflows of resources in a systematic and rational matter over the estimated useful life of the tangible capital asset.

California greenhouse gas legislation
California Assembly Bill 32 (AB-32) was passed by California lawmakers in 2006 and is an effort by the State of California to set a 2020 greenhouse gas emissions reduction goal into law. The goal is to reach a statewide emission limit of 427 million metric tons of carbon dioxide equivalent of greenhouse gases (GHG). Central to this initiative is the implementation of a cap and trade program, which covers major sources of GHG emissions in the State including power plants. The legislation directed the California Air Resources Board (ARB) to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. A scoping plan is expected sometime in 2021. The program starts with an enforceable compliance obligation beginning with the 2014 GHG emissions. The cap and trade program includes an enforceable emissions cap that will decline over time. The State distributes allowances, which are tradable permits, equal to the emissions allowed under the cap. Sources under the cap will need to surrender allowances and offsets equal to their emissions at the end of each compliance period. The District is subject to AB 32 and became subject to the requirements under the cap and trade program in 2013. The allowances distributed to the District from the State for the District's retail customers are used in operations. There is no s in service capacity and no asset has been recognized.

Subsequent events
Subsequent events have been assessed through April 27, 2021.

Recent accounting pronouncements
In June 2017, the GASB issued Statement No. 87, *Leases* (GASB 87). This statement establishes a single approach to accounting for and reporting leases based on the principle that leases are financings of the right to use an underlying asset. Under this statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. Limited exceptions to the single-approach guidance are provided for short-term leases, defined as lasting a maximum of twelve months at inception, including any options to extend, financed purchases, leases of assets that are investments and certain regulated leases. This statement is effective for TID in 2023. TID is currently assessing the financial statement impact of adopting this statement.

Note 2 – Summary of Significant Accounting Policies (continued)

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. The primary objective of GASB 91 is to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with commitments extended by issuers, arrangements associated with conduit debt obligations, and related note disclosures. This statement is effective for TID in 2022. TID is currently assessing the financial statement impact of adopting this statement.

In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. The objectives of GASB 92 is to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB statements. This statement is effective for TID in 2022. TID is currently assessing the financial statement impact of adopting this statement.

In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates.* Some governments have entered into agreements in which variable payments made or received depend on an interbank offered rate (IBOR), most notably the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, LIBOR is expected to cease to exist in its current form at the end of 2021, prompting governments to amend or replace financial instruments for the purpose of replacing LIBOR with other reference rates. The objective of this statement is to address accounting and financial reporting implications that result from the replacement of an IBOR. This statement is effective for TID in 2023. TID is currently assessing the financial statement impact of adopting this statement.

In May 2020, GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance.* The objective of this Statement is to provide temporary relief from certain new accounting and financial reporting requirements in light of the COVID-19 pandemic. The Statement is effective immediately and the Board has adopted the provisions for the year ended December 31, 2020.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements* (GASB 96), to provide guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for governments. The statement (1) defines a SBITA as a contract that conveys control of the right to use another party's information technology software, alone or in combination with tangible capital assets, as specified in the contract for a period of time in an exchange or exchange-like transaction; (2) establishes that a SBITA results in a right-to-use subscription asset and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in GASB No. 87, Leases, as amended. This statement is effective for the Authority in fiscal year 2023. The Authority is currently assessing the financial statement impact of adopting this statement.

(dollars in thousands)

Note 3 – Utility Plant

The summarized activity of TID's utility plant during 2020 is presented below:

	December 31, 2019	Additions	Transfers	Disposals	December 31, 2020
NONDEPRECIABLE UTILITY PLANT					
Land	$ 33,032	$ 1,664	$ -	$ (18)	$ 34,678
Emission credits	20,187	-	-	-	20,187
Construction in progress	82,269	50,362	(51,804)	-	80,827
Total nondepreciable utility plant	135,488	52,026	(51,804)	(18)	135,692
DEPRECIABLE UTILITY PLANT					
Generation	986,504	-	4,564	(4,400)	986,668
Distribution	378,906	-	14,339	(1,212)	392,033
Transmission	183,156	-	1,700	-	184,856
General	95,385	-	28,480	(1,653)	122,212
Future power rights	26,774	-	89	-	26,863
Irrigation	97,612	-	2,617	-	100,229
Investment in gas properties	123,807	-	15	-	123,822
Emission allowances	22,669	8,565	-	(1,197)	30,037
Total depreciable utility plant	1,914,813	8,565	51,804	(8,462)	1,966,720
Less: accumulated depreciation, amortization, and depletion	(856,064)	(65,276)	-	8,147	(913,193)
Depreciable utility plant, net	1,058,749	(56,711)	51,804	(315)	1,053,527
Utility plant, net	$ 1,194,237	$ (4,685)	$ -	$ (333)	$ 1,189,219

(dollars in thousands)

Note 3 – Utility Plant (continued)

The summarized activity of TID's utility plant during 2019 is presented below:

	December 31, 2018	Additions	Transfers	Disposals	December 31, 2019
NONDEPRECIABLE UTILITY PLANT					
Land	$ 33,032	$ -	$ -	$ -	$ 33,032
Emission credits	20,187	-	-	-	20,187
Construction in progress	63,735	45,125	(26,591)	-	82,269
Total nondepreciable utility plant	116,954	45,125	(26,591)	-	135,488
DEPRECIABLE UTILITY PLANT					
Generation	984,376	-	2,239	(111)	986,504
Distribution	369,787	-	10,657	(1,538)	378,906
Transmission	176,964	-	6,192	-	183,156
General	97,274	-	3,081	(4,970)	95,385
Future power rights	26,738	-	36	-	26,774
Irrigation	93,277	-	4,335	-	97,612
Investment in gas properties	123,756	-	51	-	123,807
Emission allowances	20,851	3,134	-	(1,316)	22,669
Total depreciable utility plant	1,893,023	3,134	26,591	(7,935)	1,914,813
Less: accumulated depreciation, amortization, and depletion	(798,020)	(65,793)	-	7,749	(856,064)
Depreciable utility plant, net	1,095,003	(62,659)	26,591	(186)	1,058,749
Utility plant, net	$ 1,211,957	$ (17,534)	$ -	$ (186)	$ 1,194,237

Note 4 – Participation in Joint Powers Agencies

Transmission Agency of Northern California

TID is a member of the Transmission Agency of Northern California (TANC), a JPA consisting of fifteen municipal utilities. TANC is a participant, with a 79.3% share of the California-Oregon Transmission Project (COTP) and other facilities for electric power transmission. TANC develops, operates and manages these projects. The COTP provides electric transmission between the Pacific Northwest and California. TID's entitlement share of TANC's portion of the COTP and other facilities is 17.4%, representing approximately 237 megawatts (MW) of transmission capacity. TID also has a 7.4% entitlement share of TANC's transmission under the South of Tesla transmission agreements, which provides TID with 22 MW of transmission during normal operating conditions between Tesla and Midway.

Under the TANC agreements, TID is responsible for TANC's development, operating and debt service costs on a take-or-pay basis proportionate to its entitlement share. During 2020 and 2019, TID's total expenses in connection with its TANC agreements, included in purchased power expense, totaled $7,753 and $5,356, respectively. At December 31, 2020 and 2019 TID has an affiliate receivable due from TANC of $14,169 and $14,386, respectively.

Note 4 – Participation in Joint Powers Agencies (continued)

The long-term debt of TANC is collateralized by a pledge and assignment of net revenues of each JPA, supported by the take-or-pay commitments of TID and other members. As such, TID is contingently obligated for its proportionate share of TANC's liabilities of $305,096 at December 31, 2020. Should other members of TANC default on their obligations to these JPAs, TID would be required to make "step up" payments, up to 25% of its proportionate share, to cover a portion of the defaulted payments and would be entitled to the same proportion of additional transmission.

Historically, there have been no defaults by members of TANC. To obtain audited financial statements of TANC, contact TANC at 35 Iron Point Circle, Suite 225 Folsom, CA 95630.

Northern California Power Agency (NCPA)
While NCPA develops and operates numerous projects for the generation and transmission of electric power, TID participates in two of NCPA's geothermal projects. TID has a 6.3% entitlement share in the capacity and energy from NCPA Geothermal Plants l and 2 (the Geothermal Project). TID is responsible for development, operating and debt service costs on a take-or-pay basis in proportion to its entitlement share. TID's expenses relating to the Geothermal Project, included in purchased power expense, were $2,062 and $2,030 in 2020 and 2019, respectively.

The long-term debt of NCPA is collateralized by a pledge and assignment of net revenues of each JPA, supported by the take-or-pay commitments of TID and other members. As such, TID is contingently obligated for its proportionate share of NCPA's debt related to the Geothermal Project of $982 at December 31, 2020. Should other members of NCPA default on their obligations to these JPAs, TID would be required to make "step up" payments, up to 25% of its proportionate share, to cover a portion of the defaulted payments and would be entitled to the same proportion of additional power production. Historically, there have been no defaults by members of NCPA. To obtain audited financial statements of NCPA, contact NCPA at 651 Commerce Drive, Roseville, CA 95678.

(dollars in thousands)

Note 4 – Participation in Joint Powers Agencies (continued)

Walnut Energy Center Authority
TID and Merced Irrigation District formed WECA for the principal purpose of owning and operating a 250 MW natural gas fueled generation facility that is blended into and reported as a component unit of TID. All operations of WECA are consolidated into TID's financial statements. WECA's financial information is summarized as follows:

	2020	2019
SUMMARIZED STATEMENTS OF NET POSITION		
Current assets	$ 36,927	$ 38,560
Noncurrent assets	215,959	227,965
Total assets	$ 252,886	$ 266,525
Current liabilities	$ 42,443	$ 45,251
Long-term debt, net of current portion	207,884	218,403
Deferred inflow of resources	2,559	2,871
Total liabilities and deferred inflows	$ 252,886	$ 266,525

	2020	2019
SUMMARIZED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION		
Operating revenues	$ 56,173	$ 61,392
Operating expenses	(48,905)	(50,974)
Operating income	7,268	10,418
Nonoperating revenues and expenses, net	(7,268)	(10,418)
Changes in net position	$ -	$ -

	2020	2019
SUMMARIZED STATEMENTS OF CASH FLOWS		
Net cash provided by operating activities	$ 10,564	$ 11,604
Net cash used in noncapital and related financing activities	(6,188)	(7,587)
Net cash used in capital and related financing activities	(6,972)	(15,573)
Net cash provided by investing activities	4,272	5,607
Net increase in cash and cash equivalents	1,676	(5,949)
Beginning of year cash and cash equivalents	11,402	17,351
End of year cash and cash equivalents	$ 13,078	$ 11,402

(dollars in thousands)

Note 4 – Participation in Joint Powers Agencies (continued)

Tuolumne Wind Project Authority

TID and WECA formed TWPA for the principal purpose of acquiring and operating wind farm assets. TWPA is reported as a component unit of TID. All operations of TWPA are consolidated into TID's financial statements. TWPA's financial information is summarized as follows:

	2020	2019
SUMMARIZED STATEMENTS OF NET POSITION		
Current assets	$ 41,897	$ 43,502
Noncurrent assets	276,146	290,383
Deferred outflow of resources	18,303	21,347
Total assets and deferred outflows	$ 336,346	$ 355,232
Current liabilities	$ 23,710	$ 23,353
Noncurrent liabilities	14,580	14,430
Long-term debt, net of current portion	298,056	317,449
	$ 336,346	$ 355,232

	2020	2019
SUMMARIZED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION		
Operating revenues	$ 24,794	$ 25,352
Operating expenses	(13,361)	(13,657)
Operating income	11,433	11,695
Nonoperating revenues and expenses, net	(11,433)	(11,695)
Changes in net position	$ -	$ -

	2020	2019
SUMMARIZED STATEMENTS OF CASH FLOWS		
Net cash provided by operating activities	$ 14,255	$ 2,890
Net cash (used in) capital and related financing activities	(13,915)	(15,862)
Net cash(used in) provided by investing activities	(15,406)	15,662
Net increase in cash and cash equivalents	(15,066)	2,690
Beginning of year cash and cash equivalents	41,163	38,473
End of year cash and cash equivalents	$ 26,097	$ 41,163

Note 5 – Cash, Cash Equivalents, and Investments

TID's investment policies are governed by the California Government Code and its Bond Indentures, which restrict TID's investment securities to obligations which are unconditionally guaranteed by the U.S. government or its agencies; direct and general obligations of the State or any local agency within the State; obligations of international agencies incorporated by authority of an act of Congress; commercial paper; certificates of deposit; time certificates of deposit; repurchase agreements; medium-term corporate notes; shares of beneficial interest; mortgage pass-through securities; and deposits with the LAIF and CAMP.

TID's investment policy includes restrictions for investments relating to maximum amounts invested as a percentage of the total portfolio and with a single issuer, maximum maturities, and minimum credit ratings.

Credit risk
To mitigate the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment, TID limits investments to those rated, at a minimum, "A1" or equivalent for medium-term notes and "A" for commercial paper by a nationally recognized rating agency. The following schedule presents the credit risk at December 31, 2020 and 2019. The credit ratings listed are from Standard and Poor's as of December 31, 2020. NR means not rated.

(dollars in thousands)

Note 5 – Cash, Cash Equivalents, and Investments (continued)

	Credit Rating	2020	2019
CASH AND CASH EQUIVALENTS			
Deposits	NR	$ 107,526	$ 84,660
California Asset Management Program	AAAm	55,444	69,997
Money market mutual fund	AAAm	-	8,628
Local Agency Investment Fund	NR	56,820	61,050
		219,790	224,335
SHORT-TERM INVESTMENTS			
Corporate notes	A, A-, BBB+	771	-
Certificates of deposit	A-1	3,360	4,459
Asset-backed securities	AAA, NR	354	-
Government sponsored enterprises	AA+	374	-
		4,859	4,459
CASH AND CASH EQUIVALENTS, RESTRICTED FOR LONG-TERM PURPOSES			
Deposits	NR	241	20,266
LOC deposit	NR	2,179	2,177
California Asset Management Program	AAAm	102	185
		2,522	22,628
SHORT-TERM INVESTMENTS, RESTRICTED FOR LONG-TERM PURPOSES			
U.S. Treasury notes	AA+	15,017	19,223
		15,017	19,223
LONG-TERM INVESTMENTS			
Government sponsored enterprises	AA+	51,458	12,283
Certificates of deposit	AA-, A-1, A+, A	8,771	9,532
U.S. Treasury notes	AA+	58,721	75,272
Corporate notes	AA+, AA, AA-, A+, A, A-, BBB+, NR	27,364	30,436
Asset-backed securities	AAA, NR	17,148	22,526
International government bonds	AAA	2,318	5,393
Municipal notes	AA-	5,707	1,737
Bank Note	A	752	-
		172,239	157,179
		$ 414,427	$ 427,824

(dollars in thousands)

Note 5 – Cash, Cash Equivalents, and Investments (continued)

The schedule below presents restricted and unrestricted balances of cash, cash equivalents and investments as of December 31:

	2020	2019
GENERAL OPERATING FUNDS		
Operating accounts	$ 235,048	$ 234,138
Funds designated for sale for rate stabilization	80,754	80,754
Funds designated for capital improvements	7,791	7,791
	323,593	322,683
RESTRICTED FUNDS		
Reserve funds	31,994	46,788
Debt service funds	56,388	55,938
Water studies	273	238
Letter of credit deposit (time certificate)	2,179	2,177
	90,834	105,141
	$ 414,427	$ 427,824

Custodial credit risk

This is the risk that in the event of the failure of a depository financial institution or counterparty to a transaction, TID's deposits may not be returned or TID will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of another party. TID does not have a deposit policy for custodial credit risk. At December 31, 2020 and 2019, TID had deposits totaling $1,257 and $1,204, respectively, which are insured by the FDIC. The remaining deposits of $108,689 and $103,722 are uncollateralized and uninsured at December 31, 2020 and 2019, respectively. TID's money market mutual fund is collateralized with shares held by the pledging bank's trust department, who is acting as TID's agent. All investments are held in TID's name. Investments in the LAIF and CAMP at December 31, 2020 and 2019, of $112,366 and $131,232, respectively, were uninsured and uncollateralized.

(dollars in thousands)

Note 5 – Cash, Cash Equivalents, and Investments (continued)

Concentration of credit risk

This is the risk of loss attributed to the magnitude of an entity's investment in a single issuer. TID places no limit on the amounts invested in any one issuer for federal agency securities, except for mortgage pass through securities, which may not exceed 20% of TID's portfolio. For disclosure purposes, investments issued or explicitly guaranteed by the U.S. government and investment in mutual funds and external investment pools are not required to be evaluated for concentration of credit risk. The following are the concentrations or risk representing 5% or greater in a single issuer in either year, all of which are government sponsored enterprises:

	2020	2019
Investment type		
Federal National Mortgage Association (Fannie Mae)*	21%	N/A

*Does not represent 5% or more at December 31, 2019

Interest rate risk

Although TID has restrictions as to the maturities of some of the investments, it does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increases in interest rates. All of TID's cash and cash equivalents have original maturities of 90 days or less. Investments maturing within one year are classified as current. At December 31, 2020 and 2019, TID has investments with original maturities of greater than 90 days, which are therefore subject to increased interest rate risk. The following schedules indicate the interest rate risk at December 31:

	2020	Weighted Average Maturity (Years)
Investment type		
Corporate notes	$ 28,135	2.07
Government sponsored enterprises	51,831	2.66
Municipal notes	5,707	2.74
Certificates of deposits	12,131	1.19
Asset-backed securities	17,502	3.20
International government bonds	2,318	2.64
Bank Note	751	2.44
U.S. Treasury notes	73,738	1.62
Total fair value	$ 192,113	

(dollars in thousands)

Note 5 – Cash, Cash Equivalents, and Investments (continued)

	2019	Weighted Average Maturity (Years)
Investment type		
Corporate notes	$ 30,436	1.97
Government sponsored enterprises	12,283	4.65
Municipal notes	1,737	1.25
Certificates of deposits	13,991	1.61
Asset-backed securities	22,526	3.16
International government bonds	5,393	1.38
U.S. Treasury notes	94,495	1.85
Total fair value	$ 180,861	

In accordance with provisions of the credit agreements relating to certain of TID's long-term debt obligations, restricted funds are maintained at levels set forth in the agreements to provide for debt service reserve and project funding requirements. These funds are held by trustees and have maturities no later than the expected date of the use of the funds.

Note 6 – Long-Term Debt

Long-term debt consists of the following at December 31:

	2020	2019
Revenue bonds, fixed interest rates of 4.0% to 5.5%, maturing through 2046	$ 404,920	$ 459,925
WECA revenue bonds, fixed interest rates of 5.0% to 6.2%, maturing through 2037	190,765	197,750
TWPA revenue bonds, fixed interest rates of 5.0% to 6.9%, maturing through 2034	295,635	309,790
Total long-term debt outstanding	891,320	967,465
Less		
Current portion	(34,320)	(31,885)
Unamortized premiums and discounts, net	119,246	108,382
Total long-term debt, net	$ 976,246	$ 1,043,962

(dollars in thousands)

Note 6 – Long-Term Debt (continued)

Refunding
In October 2019, TID issued revenue refunding bonds, Series 2019, totaling $92,655, the proceeds of which were combined with $10,458 from a reserve fund and other available funds, and were used to refund of the remaining 2011 Series A revenue refunding bonds of $181,410, through a legal defeasance. Accordingly, the liability for the defeased bonds has been removed from long-term debt in the consolidated statements of net position. This refunding resulted in a net deferred accounting loss of $5, which was expensed during 2019. The refunding reduced aggregate debt service payments by $8,150 and resulted in a total economic gain of $1,619.

Concurrent with the TID revenue refunding bonds, Series 2019, WECA revenue refunding bonds, 2019 Series A in the amount of $61,315 were issued. The proceeds from the issued WECA revenue refunding bonds, 2019 Series A, were combined with $6,576 from a reserve fund, and used to refund the remaining WECA revenue bonds, 2010 Series A, totaling $84,515, through a legal defeasance. Accordingly, the liability for the defeased bonds has been removed from long-term debt in the consolidated statements of net position. This refunding resulted in a net deferred accounting gain of $774, which is being amortized over the life of the refunding issue. The refunding reduced aggregate debt service payments by $36,013 and resulted in a total economic gain of $30,497.

In addition to the TID revenue refunding bonds, Series 2019 and the WECA revenue refunding bonds, 2019 series A, TID entered into a forward delivery agreement to refund the TID First Priority Subordinated Revenue Refunding Bonds, Series 2011. TID revenue refunding bonds, Series 2020, in the amount of $137,150, was issued in October 2020. The proceeds from the issued TID revenue refunding bonds, 2020 Series A, were combined with $21,572 from a reserve fund, and used to refund the remaining TID First Priority Subordinated Revenue Refunding Bonds, Series 2011, totaling $181,410, through a legal defeasance. The refunding reduced aggregate debt service payments by $60,827 and resulting in a total economic gain of $45,708.

The Build America Bonds were sold as a taxable issue and TID receives a federal subsidy of 32%, as reduced by sequester, of the interest paid on the bonds. For the years ended December 31, 2020 and 2019, TID received $3,458 and $3,449 in this federal subsidy which is included in other income on the statement of revenues, expenses, and changes in net position.

The summarized activity of TID's long-term debt during 2020 and 2019 is presented below:

	December 31, 2019	Additions	Payments and Amortization	December 31, 2020	Amounts Due Within One Year
Revenue bonds	$ 967,465	$ 137,150	$ (213,295)	$ 891,320	$ 34,320
	967,465	137,150	(213,295)	891,320	$ 34,320
Less					
Unamortized premiums	108,382	28,281	(17,417)	119,246	
Total long-term debt, net	$ 1,075,847	$ 165,431	$ (230,712)	$ 1,010,566	

(dollars in thousands)

Note 6 – Long-Term Debt (continued)

	December 31, 2018	Additions	and Amortization	December 31, 2019	Due Within One Year
Revenue bonds	$ 955,885	$ 153,971	$ (142,391)	$ 967,465	$ 31,885
	955,885	153,971	(142,391)	967,465	$ 31,885
Less					
Unamortized premiums	79,339	40,295	(11,252)	108,382	
Total long-term debt, net	$ 1,035,224	$ 194,266	$ (153,643)	$ 1,075,847	

Component unit debt

The TWPA and WECA revenue bonds are payable solely from the unconditional payments made by TID under Power Purchase Agreements with both TWPA and WECA, and also include amounts held by a trustee for the benefit of the registered owners of the bonds. TID has an unconditional obligation to make all payments to TWPA and WECA, regardless of the output of the projects. TID guarantees to make payments sufficient to pay principal and interest and all other payments required to be made under the Power Purchase Agreements. TWPA and WECA are not required to repay TID for any amounts under this guarantee.

General

The revenue bonds are collateralized by a pledge of, and a lien on, the revenues of the entire electric and irrigation system after deducting maintenance and operation costs, as defined in the bond resolutions. The 2011 Revenue Refunding Bonds, the TID first priority subordinated revenue refunding bonds, Series 2014 and the TID first priority subordinated revenue refunding bonds, Series 2016 are subordinate to the 2010 revenue refunding bonds. As noted above, the 2010 revenue refunding bonds were refunded and therefore the above mentioned TID bonds are no longer subordinated as of the refunding date. TID's bond resolutions contain various covenants that include requirements to maintain minimum debt service coverage ratios, certain financial ratios, stipulated minimum funding of revenue bond reserves, and various other requirements.

Fixed rate revenue bonds totaling $89,510, $141,425, and $194,435 may be subject to redemption during 2024, 2027 and 2031, respectively, by TID without a premium or discount. Fixed rate revenue bonds totaling $188,350 may be subject to redemption by TID at any interest date with a make whole premium.

(dollars in thousands)

Note 6 – Long-Term Debt (continued)

TID's scheduled future annual principal maturities and interest are as follows at December 31, 2020:

	Principal	Interest	Total
2021	$ 34,320	$ 46,105	$ 80,425
2022	37,780	44,204	81,984
2023	39,925	42,190	82,115
2024	42,740	40,003	82,743
2025	45,495	37,676	83,171
2026-2030	241,775	151,230	393,005
2031-2035	281,740	70,510	352,250
2036-2040	114,110	23,658	137,768
2041-2045	48,930	4,658	53,588
2046	4,505	-	4,505
	$ 891,320	$ 460,234	$ 1,351,554

Note 7 – Commercial Paper

TID utilizes a commercial paper program which is the WECA commercial paper program, which is used to finance capital expenditures up to $60,000, primarily WECA improvements and gas field capital expenditures. At December 31, 2020 and 2019, the balance outstanding was $29,496 and $33,878, respectively, under this commercial paper program, of which $11,665 and $12,447 was taxable at December 31, 2020 and 2019, respectively. The effective interest rate for the commercial paper outstanding at December 31, 2020 and 2019 was 0.20% and 1.37%, respectively, and the average term was 85 and 46 days, respectively. A letter of credit of $65,400 supports the sale of the commercial paper and TID incurs an annual fee for this service. There has not been a term advance under the letter of credit, which expires in September 2022. The counterparty to the letter of credit is a national bank whose credit rating is AA-Stable (Standard & Poor's).

The activity of TID's commercial paper during 2020 and 2019 is presented below:

	2020	2019
BALANCES, beginning of year	$ 33,878	$ 99,764
Additions	-	38,557
Payments	(4,382)	(104,443)
BALANCES, end of year	$ 29,496	$ 33,878

(dollars in thousands)

Note 8 – Regulatory Deferrals

TID's Board has taken various regulatory actions that result in differences between recognition of revenues and expenses for rate-making purposes as reflected in these consolidated financial statements and as incurred. These actions result in regulatory assets and credits. Regulatory balances are as follows:

Regulatory assets
Regulatory assets consist of the following at December 31:

	2020	2019
Debt issuance costs	$ 6,669	$ 7,556
Pension costs	40,351	43,041
	$ 47,020	$ 50,597

Regulatory credits
Regulatory credits consist of the following at December 31:

	2020	2019
Electric rate stabilization	$ 46,678	$ 46,678
Power supply adjustment	103,961	78,026
Deferred auction sales	-	1,733
Unrealized gain on investments	2,660	1,810
	$ 153,299	$ 128,247

Regulatory assets
Debt issuance costs – The debt issuance costs will be collected through retail rates over the life of the respective debt and therefore will be expensed over the life of the respective debt. Accordingly, costs incurred in connection with the issuance of debt obligations, principally underwriters' and legal fees, are deferred on the statement of net position as a regulatory asset and are amortized into interest expense over the terms of the related obligations using the effective interest method.

Pension costs – TID established a regulatory asset for pension costs related to the adoption of GASB 68 which required TID to record a net pension liability. The regulatory asset is being amortized over 20 years, which began in 2016.

Note 8 – Regulatory Deferrals (continued)

Regulatory credits

Electric rate stabilization – These amounts are recognized as increases in income in future periods based on a rate program approved by the Board which releases rate stabilization amounts under identified circumstances. As part of the 2019 budget, the Board elected to utilize funds to from the electric rate stabilization regulatory account to fund certain capital projects; as a result, $9,570 was utilized to fund capital projects for the year ending December 31, 2019.

Power supply adjustment – TID's rate schedule power supply adjustment (PSA) billing factor provides for an adjustment to the kilowatt-hour (KWh) portion of customer bills to reflect variations in the variable cost of power supply, which comprises purchased power, fuel used for generation of electric energy and gas field costs including related capital costs, reduced by revenue from wholesale sales of gas and energy to other entities. The PSA rate is reset semi-annually in June and December. The Board has limited reset amounts to ($0.005) to $0.01 per KWh. A balancing account is maintained in an amount by which the energy revenues collected from retail customers are less than (or more than) the actual cost of power supply. Excesses or (deficiencies) in the balancing account are managed by increasing (or decreasing) the PSA billing factor. During 2020, $25,935 was added to the deferred power supply regulatory account. During 2019, $30,235 was added to the deferred power supply regulatory account.

Deferred auction sales – TID has participated in the carbon allowance auctions under AB-32, the Global Warming Solutions Act. In 2014, the Board authorized the deferral of AB-32 auction proceeds from the sale of emission credits, to match the revenue recognition with the related expenses. The difference between the auction proceeds received and the funds spent on AB-32 programs will be deferred into future years. As funds are spent on AB-32 programs the deferred auction sales are recognized in rates. TID has spent less than it has collected in AB-32 revenues and has recorded a regulatory credit of $0 and $1,733 at December 31, 2020 and 2019, respectively.

Unrealized gain on investments – TID defers unrealized holding gains and losses on its investments until such investments mature or are sold which is consistent with TID's rate setting process.

(dollars in thousands)

Note 9 – Derivative Financial Instruments

TID enters into contracts for the purchase of electricity to meet the expected needs of its retail customers and for the purchase, transportation and storage of natural gas to meet its generation needs. TID also enters into hedging transactions to reduce the price volatility of some of these agreements. Many of these contracts are considered derivative financial instruments under the provisions of GASB 53. For those contracts, substantially all of the electricity contracts and most of the gas related contracts qualify as normal purchases or normal sales under GASB 53 because TID takes or makes delivery under the related contract, and as a result, the contracts are not required to be recorded at fair value. The fair values of TID's derivative instruments that are not considered normal purchases or normal sales are as follows:

	December 31, 2020	December 31, 2019
Derivative financial instrument assets		
Gas related contracts	$ 156	$ 286
Electric related contracts	-	-
Total derivative financial instruments	156	286
Less: current portion	(156)	(286)
	$ -	$ -
Derivative financial instrument liabilities		
Gas related contracts	$ 4,419	$ 5,920
Electric related contracts	-	-
Total derivative financial instruments	4,419	5,920
Less: current portion	(681)	(1,130)
	$ 3,738	$ 4,790

Note 10 – Fair Value Measurements

GASB 72 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). TID utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

GASB 72 establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy defined by GASB 72 are as follows:

Level 1 – inputs are quoted prices (unadjusted inactive markets for identical assets or liabilities).

Level 2 – inputs are inputs other than quoted prices included in Level 1 that are observable for an asset or liability, either directly or indirectly.

Level 3 – inputs are unobservable inputs that reflect TID's own assumptions about factors that market participants would use in pricing the asset or liability.

The valuation methods of the fair value measurements are as follows:

CAMP – uses the net asset value per share as determined by the portfolio manager multiplied by the number of shares held. The portfolio includes investments exclusively in the following authorized investments: U.S. government and agency obligations, repurchase agreements collateralized by U.S. government and agency obligations, negotiable certificates of deposit, bankers' acceptances and commercial paper. The fair values of the securities are generally based on quoted market prices for similar assets.

LAIF – uses the fair value of the pool's share price multiplied by the number of shares held. This pool can include a variety of investments such as U.S. government securities, federal agency securities, negotiable certificates of deposit, bankers' acceptances, commercial paper, corporate bonds, bank notes, and other investments. The fair values of the securities are generally based on quoted market prices for similar assets.

Government sponsored enterprises – uses a market based approach which considers yield, price of comparable securities, coupon rate, maturity, credit quality and dealer-provided prices.

U.S. Treasury notes – uses prices quoted in active markets for those securities.

Corporate notes – uses a market based approach. Evaluations are based on various market and industry inputs.

Municipal notes – uses a market approach based on institutional note quotes. Evaluations are based on various market and industry inputs.

(dollars in thousands)

Note 10 – Fair Value Measurements (continued)

Asset-backed securities – uses a market approach based on institutional note quotes. Evaluations are based on various market and industry inputs.

International government bonds – uses a market approach based on institutional note quotes. Evaluations are based on various market and industry inputs.

Certificates of deposit – uses a market approach based on institutional note quotes. Evaluations are based on various market and industry inputs.

Money market mutual fund – uses a net asset value as determined by the fund manager. Money market mutual fund may include several different underlying obligations, of which at least 80% of the net assets are invested in U.S. Government obligations including, U.S. Treasury obligations and obligations of U.S. Government Agencies, authorities, instrumentalities, or sponsored enterprises obligations, and municipal securities.

The following table identifies the level within the fair value hierarchy that TID's financial assets and liabilities were accounted for on a recurring basis as of December 31, 2020 and 2019, respectively. As required by GASB 72, financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. TID's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of the fair value of liabilities and their placement within the fair value hierarchy levels.

	Fair Value as of December 31, 2020		
	Level 1	Level 2	Total
Investments, including cash and cash equivalents			
California Asset Management Program	$ -	$ 55,546	$ 55,546
Local Agency Investment Fund	-	56,820	56,820
U.S. Treasury Notes	73,738	-	73,738
Government sponsored enterprises	-	51,831	51,831
Corporate notes	-	28,135	28,135
Municipal notes	-	5,707	5,707
Certificates of deposit	-	12,131	12,131
Asset-backed securities	-	17,502	17,502
International government bonds	-	2,318	2,318
Bank Note	-	752	752
Total investments, including cash equivalents	$ 73,738	$ 230,742	$ 304,480

(dollars in thousands)

Note 10 – Fair Value Measurements (continued)

	Fair Value as of December 31, 2019		
	Level 1	Level 2	Total
Investments, including cash and cash equivalents			
California Asset Management Program	$ -	$ 70,180	$ 70,180
Local Agency Investment Fund	-	61,050	61,050
U.S. Treasury Notes	94,495	-	94,495
Government sponsored enterprises	-	12,283	12,283
Corporate notes	-	30,136	30,136
Municipal notes	-	1,737	1,737
Certificates of deposit	-	13,991	13,991
Asset-backed securities	-	22,526	22,526
International government bonds	-	5,393	5,393
Money market mutual fund	-	8,628	8,628
Total investments, including cash equivalents	$ 94,495	$ 225,924	$ 320,419

Note 11 – Fiduciary Fund Retirement Plan

Plan description and benefits provided

TID has a single-employer group defined benefit pension plan, The Amended and Restated Plan for Employees and Elective Officers of Turlock Irrigation District, (the “Retirement Plan”) which provides retirement benefits covering substantially all of its employees. Employees who have completed one year of continuous service can elect to participate in the plan, but are not required to. For participants that became eligible for the Retirement Plan prior to January 1, 2013 they may retire after age 55 with benefits based on compensation and years of service to actual retirement date. For those participants that become eligible on or after January 1, 2013, they may retire after age 52 with benefits based on compensation and years of service to actual retirement date. As of each anniversary date (January 1 of each year), a retiree whose pension is being paid shall have their monthly pension subjected to a cost-of-living adjustment, as defined under the Retirement Plan. The Retirement Plan also provides death benefits for those participants having reached age 55 or 52 depending on when participants became eligible for the Retirement Plan.

TID, through the action of its Board, may amend or establish Retirement Plan provisions. The Board has appointed third parties to carry out substantially all administrative responsibilities, including custody of the Retirement Plan assets and as a result, excludes the pension trust funds from these financial statements. The Retirement Plan is a governmental plan under section 414(d) of the Internal Revenue Code (IRC). Copies of the Retirement Plan’s annual financial report may be obtained from TID’s executive office at 333 East Canal Drive, Turlock, California 95381. The Retirement Plan’s annual financial report is the responsibility of TID.

Note 11 – Fiduciary Fund Retirement Plan (continued)

Summary of significant accounting policies
For purposes of measuring net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Retirement Plan and additions to/deductions from the Retirement Plan's fiduciary net position have been determined on the same basis as they are reported by the Retirement Plan.

For this purpose, benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

Funding policy
To participate in the Retirement Plan, employees who are not members of a bargaining unit and are eligible for the Retirement Plan are required to contribute 3.25% of their earnings and employees who are members of a bargaining unit are required to contribute 4.25% of their earnings. Beginning July 1, 2020, employees who are not members of a bargaining unit and bargaining unit members' contributions increased to 4.25% and 5.25% of their earnings, respectively. Employees hired or that become eligible after January 1, 2013 are required to contribute 50% of the normal cost rate of the plan rounded to the nearest quarter of 1% as actuarially determined annually. However, the contribution rate will only adjust when the normal cost rate of the plan increases or decreases by more than 1% of payroll. For December 31, 2020 and 2019, the contribution rate for employees hired or that became eligible after January 1, 2013 was 5.5%. Under the Retirement Plan provisions established by the Board, the Retirement Plan is to be funded in amounts equal to the normal costs of the Retirement Plan plus an amortization of the past service liability. Contributions made by the employees vest immediately. Contributions made by TID are fully vested after five years of participation. For the years ended December 31, 2020 and 2019, TID made contributions of $15.3 million and $15.3 million, which includes $2.0 million and $1.8 million of employee contributions, respectively.

Investment policy
The Retirement Plan's investment policies are governed by the Pension Investment Committee. The Retirement Plan's investment policy includes restrictions for investments relating to Maximum amounts invested as a percentage of allocated portfolios to individual investment managers and with a single issuer, and minimum credit ratings.

Credit risk
To mitigate the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment, the Retirement Plan limits investments to those rated, at a minimum, "Baa" or equivalent for fixed income securities and "A-1" for cash instruments.

Custodial credit risk
This is the risk that in the event of the failure of a depository financial institution or counterparty to a transaction, the Retirement Plan's deposits may not be returned or the Retirement Plan will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of another party. The Retirement Plan does not have a deposit policy for custodial credit risk. At the Retirement Plan's fiscal year-end of June 30, 2020 and June 30, 2019, the Retirement Plan held no cash and cash equivalents collateralized with securities held by the pledging bank's trust department.

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

Concentration of credit risk
This is the risk of loss attributed to the magnitude of an entity's investment in a single issuer. As noted above, the Retirement Plan places limits on the amount an investment manager can invest in one security. Non-participant directed investments as of the Retirement Plan's fiscal year-end of June 30, 2020 and June 30, 2019 are summarized as follows:

		June 30, 2020	June 30, 2019
Non-participant directed investments greater than five percent of the Plan's fiduciary net position:			
DFA International Core Equity Portfolio	International stocks and mutual funds	$ 27,534	$ 28,149
DFA Emerging Markets Core Equity Portfolio	International stocks and mutual funds	19,550	19,186
DFA US L/C Value Portfolio	Domestic stocks and mutual funds	32,022	34,089
Vanguard Institutional Index Func	Domestic stocks and mutual funds	36,147	36,061
		115,253	117,485
Aggregate of non-participant directed investments less than five percent of the Plan's fiduciary net position		202,341	192,285
		$ 317,594	$ 309,770

Foreign currency risk
The Retirement Plan's exposure to foreign currency risk derives from its positions in foreign currency–denominated securities. The Retirement Plan's investment policy permits its investment managers to invest up to 10 percent of the total investments under their management in foreign currency-denominated investments. At the Retirement Plan's fiscal year-end June 30, 2020 and June 30, 2019 the Retirement Plan held no investments in foreign currency denominations.

Money weighted rate of return
For the fiscal years ended June 30, 2020 and 2019, the annual money weighted rate of return on retirement plan investments, net of investment expense, was 0.74% and 3.32%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

Interest rate risk

Though the Retirement Plan has restrictions as to the credit rating of fixed income securities, it does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increases in interest rates. As of the Retirement Plan's fiscal year-end June 30, 2020 and June 30, 2019, the Retirement Plan had the following investments with maturities:

		Investment Maturities (in Years) at June 30, 2020			
Investment Type	Fair Value	Less than 1	1 to 5	6 to 10	More than 10
Asset-backed securities and CMOs	$ 22,603	$ -	$ 283	$ 1,880	$ 20,440
Commercial bonds	40,028	2,809	20,735	8,585	7,899
U.S. agencies	165	-	-	-	165
U.S. treasuries	1,557	389	742	197	229
Total	$ 64,353	$ 3,198	$ 21,760	$ 10,662	$ 28,733

		Investment Maturities (in Years) at June 30, 2019			
Investment Type	Fair Value	Less than 1	1 to 5	6 to 10	More than 10
Asset-backed securities and CMOs	$ 25,701	$ 1,980	$ 374	$ 766	$ 22,581
Commercial bonds	39,363	4,271	23,172	6,807	5,113
U.S. agencies	151	-	-	-	151
U.S. treasuries	1,249	-	1,249	-	-
Total	$ 66,464	$ 6,251	$ 24,795	$ 7,573	$ 27,845

Employees covered by benefit terms

At December 31, 2020, the number of employees covered by the Retirement Plan was:

Inactive employees or beneficiaries currently receiving benefit payments	445
Inactive employees entitled to but not yet receiving benefit payments	82
Active employees	440
	967

Net pension liability

TID's net pension liability was measured as of December 31, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation date of January 1, 2020, rolled forward on an actuarial basis.

Note 11 – Fiduciary Fund Retirement Plan (continued)

Actuarial assumptions

The actuarial methods and assumptions used for the December 31, 2020 total pension liability are as follows:

- Investment rate of return applied to assets of 7.00%;
- Discount rate of 7.00%, net of pension plan investment expense, including inflation;
- Cost of living adjustment of 2.25%;
- Inflation of 2.25%; and
- Salary increases projected on a sliding schedule based on years of service, ranging from 5.75% down to 2.25%.

The mortality assumption was updated to Pri-2012 projected with scale MP-2019 generational improvements. Based on the nature of the work, workforce, and benefit offering of TID, the actual mortality experience of TID’s employees is expected to be more in line with the general US population mortality study than the Public Plan Study.

Given the size of the Retirement Plan, there is limited data available to conduct a credible experience study in all assumption areas. The liabilities and data are analyzed each year in order to identify any trends of experience deviating from the actuarial assumptions.

Discount rate

The discount rate used to measure the total pension liability was 7.0%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

The long-term expected rate of return on Retirement Plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Retirement Plan's target asset allocation as of December 31, 2020 are summarized in the following table:

	Target Allocation	Long-term Expected Real Rate of Return
Major asset classes		
Fixed income obligations and mutual funds	29.00%	2.75%
Domestic equities	36.90%	5.00%
International equities	25.10%	5.75%
Alternative assets/private equity	8.00%	6.25%
Cash	1.00%	0.50%
Total	100.00%	

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

Changes in net pension liability

The changes in TID's net pension liability for the year ended December 31, 2020 are as follows:

	Total Pension Liability (a)	Increase (Decrease) in Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
BALANCES, January 1, 2020	$ 368,044	$ 340,915	$ 27,129
Changes for the year:			
Service cost	8,450	-	8,450
Interest cost	27,481	-	27,481
Difference between expected and actual experience	1,148	-	1,148
Change of assumption	19,359	-	19,359
Contributions – employer	-	13,240	(13,240)
Contributions – employee	-	2,039	(2,039)
Benefit payments	(20,154)	(20,154)	-
Investment income	-	42,806	(42,806)
Administrative expenses	-	(360)	360
Other changes	-	45	(45)
Net changes	36,284	37,616	(1,332)
BALANCES, December 31, 2020	$ 404,328	$ 378,531	$ 25,797

Since the prior measurement date of January 1, 2019, the following changes of assumptions affected the total pension liability.

	January 1, 2020	January 1, 2019
Assumption		
Investment rate of return	7.00%	7.50%
Discount rate	7.00%	7.50%
Cost of living adjustment	2.25%	2.75%
Inflation	2.25%	2.75%

Additionally, the mortality assumption was updated to Pri-2012 projected with scale MP-2019 generational improvements. Based on the nature of the work, workforce, and benefit offering of TID, the actual mortality experience of TID's employees is expected to be more in line with the general US population mortality study than the Public Plan Study.

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability as of December 31, 2020, calculated using the discount rate of 7.00%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net pension liability	$ 79,230	$ 25,797	$ (18,469)

Pension plan fiduciary net position

Detailed information about the Retirement Plan's fiduciary net position is available in the separately issued Retirement Plan financial statements, which are typically available 210 days after the fiscal year end.

Pension expense and deferred outflows of resources and deferred inflows of resources related to pensions

For the years ended December 31, 2020 and 2019, TID recognized pension expense of $13.6 million and $18.1 million, respectively.

At December 31, 2020, TID reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Summarized statement of net position		
Differences between expected and actual experience	$ 6,059	$ 478
Changes of assumptions	22,466	-
Net difference between projected and actual earnings on pension plan investments	18,136	37,281
Total	$ 46,661	$ 37,759

(dollars in thousands)

Note 11 – Fiduciary Fund Retirement Plan (continued)

The balances as of December 31, 2020 of the deferred outflows/(inflows) of resources will be recognized in pension expense for each of the years ending December 31, as follows:

Years ending December 31,	2021	$	3,454
	2022		7,690
	2023		(5,686)
	2024		26
	2025		3,418
		$	8,902

Deferred compensation plan

TID offers its employees a deferred compensation plan (the “Deferred Plan”), which provides employees the option to defer part of their compensation until termination, retirement, death, or unforeseeable emergency. TID makes no contribution to the Deferred Plan. TID has the duty of reasonable care in the selection of investment alternatives, but neither TID nor its directors or officers have any liability for losses under the Deferred Plan. TID holds all deferred compensation assets in the name of the Deferred Plan, and accordingly, the Deferred Plan assets and corresponding liability are not recorded in the accounts of TID.

Note 12 – Other Post-Employment Benefits

TID provides post-retirement medical benefits in accordance with TID policy to qualified retirees and their spouses through TID’s Employee Health Care Plan (the “Health Plan”) until the retiree and participating spouse reach age 65. The Health Plan is part of the EIAHealth Program, which is a multi-employer public sector healthcare purchasing pool, for which EIAHealth is the administrator and through which the action of its Board may amend or establish Health Plan provisions. The qualification requirements for these benefits are the same as those under TID’s Retirement Plan.

The Board has appointed third parties to carry out certain administrative responsibilities. TID contributes the full cost of coverage for retirees; however, retirees contribute the estimated health care cost of dependents. For participants hired on or after January 1, 2018, TID contributes a percentage ranging from 50 percent to 100 percent of the retiree’s premium cost, based on years of service. At the time of retirement an employee may utilize the remaining balance of unused sick leave, at the rate defined in the employee’s applicable employee contract for one month’s medical coverage for an eligible dependent. Covered retirees are also responsible for personal deductibles and co-payments. Currently, 183 retirees and surviving dependents are receiving post-employment health care benefits.

TID participates in the CALPERS Pre-funding OPEB Plan, which is an irrevocable multi-employer trust and plan consisting of an aggregation of single-employer plans, with pooled administrative and investment functions. To obtain a CALPERS Pre-funding Plan report contact CALPERS at Lincoln Plaza North 400 Q Street, Sacramento, CA 95811.

(dollars in thousands)

Note 12 – Other Post-Employment Benefits (continued)

Employees covered by benefit terms
At June 30, 2020 the number of employees covered by the Health Plan was:

Inactive employees or beneficiaries currently receiving benefit payments	185
Inactive employees entitled to but not yet receiving benefit payments	-
Active employees	452
	637

Net OPEB asset
TID's net OPEB asset was measured as of June 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation date of June 30, 2019, rolled forward on an actuarial basis.

Contributions
The actuarially determined contributions were determined by actuarial valuations using the frozen entry age actuarial cost method.

Employer contributions were $15,278 for the years ended December 31, 2020 and 2019. Total covered-employee payroll and contributions as a percentage of covered-employee payroll was $43,756 and 34.92% for the year ended December 31, 2020. Total covered-employee payroll and contributions as a percentage of covered-employee payroll was $39,392 and 38.78% for the year ended December 31 2019, respectively.

Actuarial methods and assumptions
Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

(dollars in thousands)

Note 12 – Other Post-Employment Benefits (continued)

In the most recent actuarial valuation the entry age actuarial cost method was used. The actuarial assumptions included a 7.00% investment rate of return per year, inflation rate of 2.75% per year, payroll increases range from 1.25% to 3.25% per annum based on years of service, in aggregate and an annual healthcare cost trend rate of 6.5% initially, reduced by decrements to an ultimate rate of 5% after four years. Assets of the Health Plan, as of the latest actuarial report, were valued on a market value basis. Future gains and losses may be averaged over five years subject to certain restrictions. The unfunded actuarial accrued liability (UAAL) is being amortized over rolling 15 years using a level dollar amortization method.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset allocation as of June 30, 2020 are summarized in the following table:

	Target Allocation	Long-term Expected Real Rate of Return
Major asset classes		
Global equity	59.00%	5.50%
Global debt securities	25.00%	1.35%
Inflation assets	5.00%	1.50%
Commodities	3.00%	1.75%
Real Estate Investment Trusts (REITs)	8.00%	3.65%
Total	100.00%	

(dollars in thousands)

Note 12 – Other Post-Employment Benefits (continued)

Changes in net OPEB asset

The changes in TID's net OPEB asset for the year ended June 30, 2020 are as follows:

	Total OPEB Liability (a)	Increase (Decrease) in Plan Fiduciary Net Position (b)	Net OPEB Liability (Asset) (a)-(b)
BALANCES, July 1, 2019	$ 20,191	$ 23,695	$ (3,504)
Changes for the year			
Service cost	1,023	-	1,023
Interest cost	1,417	-	1,417
Contributions – employer	-	1,969	(1,969)
Contributions – employee	-	-	-
Benefit payments	(1,969)	(1,969)	-
Investment income	-	837	(837)
Administrative expenses	-	(12)	12
Difference between expected and actual experience	(51)	-	(51)
Change of assumption	-	-	-
Net changes	420	825	(405)
BALANCES, June 30, 2020	$ 20,611	$ 24,520	$ (3,909)

Since the prior measurement date of June 30, 2019, there have been no changes of assumptions that affected the total pension liability.

Sensitivity of the net OPEB asset to changes in the discount rate

The following presents the net OPEB asset as of June 30, 2019, calculated using the discount rate of 7.00%, as well as what the net OPEB asset would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net OPEB liability (asset)	$ (2,422)	$ (3,910)	$ (5,266)

(dollars in thousands)

Note 12 – Other Post-Employment Benefits (continued)

Sensitivity of the net OPEB liability to changes in healthcare cost trend rates

	Current Healthcare Cost Trend Rates		
	1% Decrease (5.50%HMO/5.50%PPO decreasing to 4.00%HMO/4.00%PPO)	(6.50%HMO/6.50%PPO decreasing to 5.00%HMO/5.00%PPO)	1% Increase (7.50%HMO/7.50%PPO increasing to 6.00%HMO/6.00%PPO)
Net OPEB liability (asset)	$ (5,813)	$ (3,910)	$ (1,689)

OPEB expense and deferred outflows of resources and deferred inflows of resources related to OPEB

For the years ended December 31, 2020 and 2019, TID recognized OPEB expense of $0.7 million and $0.8 million, respectively.

At December 31, 2020, TID reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Summarized statement of net position		
Differences between expected and actual experience	$ -	$ 1,825
Changes of assumptions	305	-
Net difference between projected and actual earnings on OPEB plan investments	758	-
Contribution made subsequent to the measurement date	969	-
Total	$ 2,032	$ 1,825

The balances as of December 31, 2020 of the deferred outflows/(inflows) of resources will be recognized in pension expense for each of the years ending December 31, as follows:

Years ending December 31,	2021	$ (54)
	2022	(54)
	2023	(50)
	2024	(87)
	2025	(251)
	Thereafter	(266)
		$ (762)

Note 13 – Asset Retirement Obligations

In 2019, TID adopted GASB issued Statement No. 83, *Certain Asset Retirement Obligations* (GASB 83). An Asset Retirement Obligation (ARO) is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this statement. GASB 83 establishes the criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs.

Recognition occurs when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates the government to perform the asset retirement activities. GASB 83 requires the measurement of the ARO be based on the probability weighted best estimate of the current value of outlays expected to be incurred, and adjusted for general inflation or deflation at least annually. It requires a government to evaluate all relevant factors at least annually to determine whether the effects of one or more of the factors are expected to significantly change the estimated asset retirement outlays. The ARO should only be remeasured when the result of the evaluation indicates a significant change in the estimated outlays. GASB 83 also requires disclosures of descriptive information about the nature of a government's AROs including the methods and assumptions used for the estimates of the liabilities, the estimated remaining useful life of the associated tangible capital assets, how any funding and assurance requirements are being met, and the amount of any assets restricted for payment of the AROs (if not separately displayed in the financial statements).

If a liability for an ARO (or portions thereof) has been incurred by a government but is not yet recognized because it is not reasonably estimable, the government should disclose that fact and the reasons therefor.

Prior to the adoption of GASB 83, TID reported an ARO liability of $4.4 million, which was included in Liabilities on the Consolidated Statements of Net Position, consistent with prior accounting standards.

The adoption of GASB 83, had no impact on the on beginning net position, but did result in an increase to deferred outflow of resources for asset retirement obligation of $11.5 million, an increase in asset retirement obligation of $10.0 million and a decrease to Utility Plant, net of $1.5 million.

As described in Note 2 and 4, TWPA has a membership interest in a 136.6 MW wind farm, consisting of 62 wind-turbine generators located in Klickitat County, Washington and is a blended component unit of TID. In conjunction with the purchase of the Tuolumne Wind Project, TID recorded an ARO related to a decommissioning plan approved by Klickitat County. As the decommissioning plan represents a legal obligation to clean up the site at the retirement of the asset to comply with the approved contract with the Klickitat County, Washington, it meets the definition of an ARO. The Project is operated and maintained pursuant to an operating and maintenance agreement with the operator. During 2019, the operator obtained an estimate, from a third party, to determine the estimated cost of executing the decommissioning plan. The previous estimate had been performed at the time of purchase of the Tuolumne Wind Project. The estimate presented a list of the work that will be performed on site such as turbine removal, foundation removal and road removal. Cost estimates include labor and equipment use.

Note 13 – Asset Retirement Obligations (continued)

The liability recognized for the ARO was $14,580 and 14,430 for the year ended December 31, 2020 and 2019, respectively. The estimated remaining useful life of the Project is approximately 13 years. The deferred outflows recognized was $10,018 and $10,703 as of December 31, 2020 and 2019 and is amortized over the remaining useful life of the Project. During the years ended December 31, 2020 and 2019, TID recorded $835 and $823 of expense, respectively.

Note 14 – Commitments

Power sales agreement
TID supplies energy to Merced Irrigation District (MeID) under a ten-year Power Supply Agreement (MeID Agreement) that began on May 1, 2017. The price for the energy under the MeID Agreement is based on the market price of energy in California. However, MeID is obligated to provide for capacity resources under the MeID Agreement. The MeID Agreement includes certain ancillary services that can be competitively procured and for the provision of certain control room services. Transmission service and ancillary services provided by TID are addressed by a separate Interconnection and Transmission Agreement. Either Party may terminate the agreement on two-year's notice effective on an anniversary date not before 2021. Sales and services provided under the agreements totaled $29,408 and $27,275 in 2020 and 2019, respectively, and have been recorded in electric wholesale revenues within the statement of revenues, expenses and changes in net position.

Power purchase agreements
TID has a long-term power purchase agreement with a power producer to purchase capacity and associated energy to meet its load requirements, the contract expires in December 2024. Capacity and certain energy is purchased on a take-or-pay basis. Power purchased under the agreement totaled $1,132 and $1,984 in 2020 and 2019, respectively, and has been recorded in purchased power expense within the statement of revenues, expenses and changes in net position. During 2019, TID received a payment of $3,876 for its share of the Coal inventory from a previous purchase power agreement that expired in 2018, which has been recorded in purchased power expense within the statement of revenues, expenses and changes in net position.

Gas purchase agreements
TID has three natural gas supply agreements with three counterparties to meet the consumption of its natural gas fired power plants. Each contract is with a different counterparty. The first contract obligates the fuel manager to supply all the natural gas required by TID's Walnut and Almond power plants (excluding the Almond 2 power plant) up to 27,000 million British Thermal Units (MMBtu) per day. This contract automatically renews for a 1-year term unless terminated by either party. The second contract obligates the fuel manager to supply all the natural gas required by the Walnut Energy Center up to 55,000 MMBtu per day. This contract expires on January 1, 2026.

(dollars in thousands)

Note 14 – Commitments (continued)

The third contract obligates the fuel manager to supply all the natural gas required by the Almond 2 power plant up to 50,400 MMBtu per day. This contract expires on January 1, 2022. All contracts allow for TID to purchase gas from parties other than the fuel manager and obligate the fuel manager to purchase TID's excess gas. All contracts provide for pre-determined index-based prices or a mutually agreed upon price. Fuel purchased under the three agreements totaled $30,342 and $30,043 in 2020 and 2019, respectively, and has been recorded in generation and fuel expense within the statement of revenues, expenses and changes in net position.

Gas transportation capacity and storage agreements

TID has nine long-term gas transportation capacity agreements and one long-term gas storage agreement with Canadian and U.S. companies to transport natural gas to TID's natural gas fired power plants from gas supply basins in Alberta, Canada. The gas transportation capacity agreements complement TID's gas purchase agreements, described above, but expire through 2033. Payments under these agreements totaled $3,164 and $3,353 in 2020 and 2019, respectively, and have been recorded in generation and fuel expense within the statement of revenues, expenses and changes in net position.

The approximate future minimum obligations for the above described power purchase, gas supply, and gas transportation and storage contracts are as follows at December 31, 2020:

2021	$ 6,471
2022	6,709
2023	3,057
2024	2,745
2025	2,410
Thereafter	20,827
	$ 42,219

(dollars in thousands)

Note 14 – Commitments (continued)

Solar power purchase agreement

TID has a twenty-year power purchase agreement to purchase 100% of the output from a 54 megawatt Solar Plant to assist TID in meeting its environment compliance requirements. TID purchases the output along with the environmental attributes as it is produced, which began in February 2017. Purchases under this agreement totaled $6,073 and $7,331 in 2020 and 2019, respectively, and have been recorded in purchased power expense within the statement of revenues, expenses and changes in net position. The annual purchases under the remaining term of the power purchase agreement (based on guaranteed energy production under the purchase power agreement) is estimated to as follows:

2021	$	7,703
2022		7,683
2023		7,664
2024		7,644
2025		7,625
Thereafter		83,821
	$	122,140

Biomass power purchase agreement

TID has a five-year power purchase agreement to purchase 4.48% of the output from an 18-megawatt biomass plant to assist TID in meeting its SB859 and environment compliance requirements. TID purchases the output along with the renewable energy credits as it is produced, which began in April 2018. Purchases under this agreement totaled $2 and $131 in 2020 and 2019, respectively, and have been recorded in purchased power expense within the statement of revenues, expenses and changes in net position. Energy deliveries under the power purchase agreement stopped in February 2020 due to the bankruptcy filing of the owner. Under the power purchase agreement, a letter of credit was issued for TID’s benefit and available to be drawn. TID drew the full amount of the letter of credit in the amount of $81 and is currently holding the drawn amount to mitigate potential damages resulting from the bankruptcy filing. The facility has been purchased by another owner and is expected to be running sometime in 2021. The annual purchases under the remaining term of the power purchase agreement (based on forecasted energy production) is estimated to as follows:

2021	$	620
2022		620
2023		207
	$	1,447

(dollars in thousands)

Note 14 – Commitments (continued)

Land leases

TWPA has leases with nine land owners on which its turbines are located. The land owners are paid a fixed price per kilowatt-hour based on the output of the respective turbines. Each agreement is for 20 years beginning in 2009 with two 10-year renewal options. Total expense for the years ended December 31, 2020 and 2019 was $1,203 and $1,034, respectively, and has been recorded in generation and fuel expense within the statement of revenues, expenses and changes in net position. The annual lease expense under the remaining initial term of the land leases (based on average wind data measured for 10 years) is estimated as follows:

2021	$ 1,154
2022	1,154
2023	1,154
2024	1,154
2025	1,154
Thereafter	5,039
	$ 10,809

Note 15 – Contingencies and Uncertainties

Novel coronavirus (COVID-19)

During 2020, an outbreak of a novel coronavirus (COVID-19) occurred in the United States, along with various other countries globally. On March 11, 2020, the World Health Cooperative assessed the novel coronavirus outbreak and characterized it as a pandemic. Subsequent to the declaration of a pandemic, a variety of federal, state, and local governments have taken actions in response to the pandemic, which have ranged by jurisdiction, but are generally expected to result in a variety of negative economic consequences, the scope of which are not currently known or quantifiable. The duration and intensity of the impact of the coronavirus and resulting impact to TID is unknown.

General contingencies

In the normal course of operations, TID is party to various claims, legal actions and complaints, including possible liability for environmental matters. Although the ultimate outcome of these matters is not presently determinable, TID's management believes the resolution of all such pending matters will not have a material adverse effect on TID's financial position.

Note 16 – Subsequent Events

Subsequent to year end, TID officially began participating in the California Independent System Operator's Western Energy Imbalance Market (EIM) on March 24th. The EIM allows participants to buy and sell power close to the time the electricity is consumed and give operators real-time visibility across neighboring grids. TID believes that participation in EIM will allow TID to manage TID generating assets more effectively and improve reliability while reducing its carbon footprint and lowering costs.

Required Supplementary Information

(dollars in thousands)

Schedule of changes in net pension liability and related ratios – The schedule of changes in net pension liability and related ratios is presented below for the years for which TID has the available data. Ultimately, this schedule will present 10 years of data.

	2020	2019	2018	2017	2016	2015
Total pension liability						
Service cost	$ 8,450	$ 6,152	$ 6,032	$ 5,236	$ 5,168	$ 4,369
Interest	27,481	26,099	24,841	23,688	22,620	23,032
Difference between expected and actual experience	1,148	3,390	3,999	3,486	1,846	(1,910)
Change of assumptions	19,359	-	-	17,027	-	2,630
Benefit payments	(20,154)	(18,865)	(17,554)	(16,426)	(16,110)	(14,606)
Net change in total pension liability	36,284	16,776	17,318	33,011	13,524	13,515
Total pension liability – beginning	368,044	351,268	333,950	300,939	287,415	273,900
Total pension liability – ending (a)	$ 404,328	$ 368,044	$ 351,268	$ 333,950	$ 300,939	$ 287,415
Plan fiduciary net position						
Contributions – employer	$ 13,240	$ 13,462	$ 13,746	$ 48,921	$ 14,071	$ 14,167
Contributions – employee	2,039	1,818	1,534	1,358	1,208	1,112
Investment income	42,806	53,993	(21,321)	42,344	21,686	(2,208)
Benefit payments	(20,154)	(18,865)	(17,554)	(16,426)	(16,110)	(14,606)
Administrative expenses	(360)	(392)	(382)	(295)	(274)	(303)
Other changes	45	120	8	-	3	1
Net change in fiduciary net position	37,616	50,136	(23,969)	75,902	20,584	(1,837)
Total fiduciary net position – beginning	340,915	290,779	314,748	238,846	218,262	220,099
Total fiduciary net position – ending (b)	$ 378,531	$ 340,915	$ 290,779	$ 314,748	$ 238,846	$ 218,262
TID's net position liability – ending (a)-(b)	$ 25,797	$ 27,129	$ 60,489	$ 19,202	$ 62,093	$ 69,153
Plan fiduciary net position as a percentage of the total pension liability	93.62%	92.63%	82.78%	94.25%	79.37%	75.94%
Covered-employee payroll	$ 43,756	$ 39,392	$ 38,144	$ 36,366	$ 35,245	$ 33,349
Plan net pension liability as a percentage of covered-employee payroll	58.96%	68.87%	158.58%	52.80%	176.18%	207.36%
Annual money-weighted rate of return	12.61%	18.27%	-6.44%	16.86%	9.43%	-1.15%

(dollars in thousands)

Schedule of retirement plan contributions

The schedule of retirement plan contributions is presented below for the years for which TID has the available data. Ultimately, this schedule will present 10 years of data.

	2020	2019	2018	2017	2016
Actuarially determined contribution	$ 12,132	$ 11,859	$ 11,413	$ 13,372	$ 12,975
Contributions in relation to the actuarially determined contribution	15,278	15,278	15,278	50,279	15,279
Contribution deficiency (excess)	$ (3,146)	$ (3,419)	$ (3,865)	$ (36,907)	$ (2,304)
Covered-employee payroll	43,756	39,392	38,144	36,366	35,245
Contributions as a percentage of covered-employee payroll	34.92%	38.78%	40.05%	138.26%	43.35%

	2015	2014	2013	2012	2011
Actuarially determined contribution	$ 11,863	$ 15,324	$ 14,417	$ 14,514	$ 12,340
Contributions in relation to the actuarially determined contribution	15,279	46,561	15,279	13,083	12,338
Contribution deficiency (excess)	$ (3,416)	$ (31,237)	$ (862)	$ 1,431	$ 2
Covered-employee payroll	33,349	31,643	33,824	34,218	33,960
Contributions as a percentage of covered-employee payroll	45.82%	147.14%	45.17%	38.23%	36.33%

Notes to Schedule

The actuarially determined contributions for 2020 and 2019 were determined by actuarial valuations using the frozen entry age actuarial cost method. The actuarial assumptions utilized for the January 1, 2020 and 2019 actuarial valuations were as follows:

	January 1, 2020	January 1, 2019
Assumption		
Investment rate of return	7.00%	7.50%
Discount rate	7.00%	7.50%
Cost of living adjustment	2.25%	2.75%
Inflation	2.25%	2.75%

Realized and unrealized gains are phased in to the actuarial value of Retirement Plan assets over a three-year period, and may be adjusted so that the actuarial value of Retirement Plan assets are not less than 80% or more than 120% of the fair market value of the Retirement Plan's assets as of the current valuation date. The unfunded actuarial accrued liability (UAAL) is being amortized as a level percentage of projected payroll basis. The remaining amortization period in the latest actuary report was 15 years.

(dollars in thousands)

Schedule of changes in net OPEB asset and related ratios

The schedule of changes in net OPEB asset and related ratios is presented below for the years for which TID has the available data. Ultimately, this schedule will present 10 years of data.

	2020	2019	2018
Total OPEB liability			
Service cost	$ 1,023	$ 1,102	$ 1,072
Interest	1,417	1,514	1,476
Difference between expected and actual experience	(51)	(2,371)	-
Change of assumptions	-	406	-
Benefit payments	(1,969)	(1,969)	(2,100)
Net change in total OPEB liability	420	(1,318)	448
Total OPEB liability – beginning	20,191	21,509	21,061
Total OPEB liability – ending (a)	$ 20,611	$ 20,191	$ 21,509
Plan fiduciary net position			
Contributions – employer	$ 1,969	$ 1,969	$ 8,470
Investment income	837	1,377	1,276
Benefit payments	(1,969)	(1,969)	(2,100)
Administrative expenses	(12)	(4)	(10)
Other changes	-	-	(20)
Net change in fiduciary net position	825	1,373	7,616
Total fiduciary net position – beginning	23,695	22,322	14,706
Total fiduciary net position – ending (b)	$ 24,520	$ 23,695	$ 22,322
TID's net OPEB liability (asset) – ending (a)-(b)	$ (3,909)	$ (3,504)	$ (813)
Plan fiduciary net position as a percentage of the total OPEB liability	119.0%	117.4%	103.8%
Covered-employee payroll	$ 46,082	$ 44,740	$ 41,273
Plan net OPEB asset as a percentage of covered-employee payroll	-8.5%	-7.8%	-2.0%

Turlock Irrigation District
Schedule of OPEB Plan Contributions (Unaudited)
December 31, 2020
(dollars in thousands)

Schedule of OPEB plan contributions

The schedule of OPEB plan contributions is presented below for the years for which TID has the available data. Ultimately, this schedule will present 10 years of data.

	2020	2019	2018
Actuarially determined contribution	$ 1,943	$ 1,943	$ 1,938
Contributions in relation to the actuarially determined contribution	1,969	1,969	8,470
Contribution deficiency (excess)	$ (26)	$ (26)	$ (6,532)
Covered-employee payroll	46,082	44,740	41,273
Contributions as a percentage of covered-employee payroll	4.27%	4.40%	20.52%

Notes to Schedule

In the most recent actuarial valuation the entry age actuarial cost method was used. The actuarial assumptions included a 7.00% investment rate of return per year, inflation rate of 2.75% per year, payroll increases range from 1.25% to 3.25% per annum based on years of service, in aggregate and an annual healthcare cost trend rate of 6.5% initially, reduced by decrements to an ultimate rate of 5% after four years. Assets of the Health Plan, as of the latest actuarial report, were valued on a market value basis. Future gains and losses may be averaged over five years subject to certain restrictions. The unfunded actuarial accrued liability (UAAL) is being amortized over a rolling 15 year period, using a level dollar amortization method.

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