UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2023.

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission File Number: 001-13831

Quanta Services, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**74-2851603**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

2727 North Loop West
Houston, Texas 77008
(Address of principal executive offices, including zip code)

(713) 629-7600
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.00001 par value	PWR	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

As of July 28, 2023, the number of outstanding shares of Common Stock of the registrant was 145,198,975.

QUANTA SERVICES, INC. AND SUBSIDIARIES

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Cautionary Statement About Forward-Looking Statements and Information

This Quarterly Report on Form 10-Q (Quarterly Report) of Quanta Services, Inc. (together with its subsidiaries, Quanta, we, us or our) includes forward-looking statements reflecting assumptions, expectations, projections, intentions or beliefs about future events that are intended to qualify for the “safe harbor” from liability established by the Private Securities Litigation Reform Act of 1995. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They use words such as “anticipate,” “estimate,” “project,” “forecast,” “may,” “will,” “should,” “could,” “expect,” “believe,” “plan,” “intend” and other words of similar meaning. In particular, these include, but are not limited to, statements relating to the following:

- Projected revenues, net income, earnings per share, margins, cash flows, liquidity, weighted average shares outstanding, capital expenditures, interest rates and tax rates, as well as other projections of operating results and GAAP (as defined herein) and non-GAAP financial results, including EBITDA (as defined herein), adjusted EBITDA (as defined herein) and backlog;
- Expectations regarding our business or financial outlook;
- Expectations regarding opportunities, technological developments, competitive positioning, future economic and regulatory conditions and other trends in particular markets or industries, including with respect to our increased operations in the renewable energy market and the transition to a reduced-carbon economy;
- Expectations regarding our plans and strategies;
- The business plans or financial condition of our customers, including with respect to the transition to a reduced-carbon economy;
- The potential benefits from, and future financial and operational performance of, acquired businesses and our investments;
- Beliefs and assumptions about the collectability of receivables;
- The expected value of contracts or intended contracts with customers, as well as the expected timing, scope, services, term or results of any awarded or expected projects;
- Possible recovery of pending or contemplated insurance claims, change orders and claims asserted against customers or third parties;
- The development of and opportunities with respect to future projects, including renewable energy projects and other projects designed to support transition to a reduced-carbon economy, electrical grid modernization, upgrade and hardening projects and larger transmission and pipeline projects;
- Expectations regarding the future availability and price of materials and equipment necessary for the performance of our business;
- The expected impact of global and domestic economic conditions on our business, financial condition, results of operations, cash flows, liquidity and demand for our services, including inflation, interest rates, recessionary economic conditions and commodity prices and production volumes;
- The expected impact of changes and potential changes in climate and the physical and transition risks associated with climate change and the transition to a reduced-carbon economy;
- Future capital allocation initiatives, including the amount and timing of, and strategies with respect to, any future acquisitions, investments, cash dividends, repurchases of our equity or debt securities or repayments of other outstanding debt;
- The expected impact of existing or potential legislation or regulation;
- Potential opportunities that may be indicated by bidding activity or similar discussions with customers;
- The future demand for, availability of and costs related to labor resources in the industries we serve;
- The expected recognition and realization of our remaining performance obligations or backlog;
- Expectations regarding the outcome of pending or threatened legal proceedings, as well as the collection of amounts awarded in legal proceedings; and
- Expectations with respect to our ability to reduce our debt and maintain our current credit ratings.

These forward-looking statements are not guarantees of future performance; rather they involve or rely on a number of risks, uncertainties, and assumptions that are difficult to predict or are beyond our control and reflect management’s beliefs and assumptions based on information available at the time the statements are made. We caution you that actual outcomes and results may differ materially from what is expressed, implied or forecasted by our forward-looking statements and that any or all of our forward-looking statements may turn out to be inaccurate or incorrect. These statements can be affected by inaccurate assumptions and by known or unknown risks and uncertainties, including the following:

- Market, industry, economic, financial or political conditions that are outside of our control, including economic, energy, infrastructure and environmental policies and plans that are adopted or proposed by the U.S. federal and state governments or other governments in territories or countries in which we operate, inflation, interest rates, recessionary economic conditions, deterioration of global or specific trade relationships, and geopolitical conflicts and political unrest;

- Quarterly variations in our operating and financial results, liquidity, financial condition, cash flows, capital requirements, and reinvestment opportunities;
- Trends and growth opportunities in relevant markets, including our ability to obtain future project awards;
- Delays, deferrals, reductions in scope or cancellations of anticipated, pending or existing projects as a result of, among other things, supply chain disruptions and other logistical challenges, weather, regulatory or permitting issues, environmental processes, project performance issues, claimed force majeure events, protests or other political activity, legal challenges, inflationary pressure, reductions or eliminations in governmental funding or customer capital constraints;
- The effect of commodity prices and commodity production volumes, which have been and may continue to be affected by inflationary pressure, on our operations and growth opportunities and on our customers' capital programs and demand for our services;
- The successful negotiation, execution, performance and completion of anticipated, pending and existing contracts;
- Events arising from operational hazards, including, among others, wildfires and explosions, that can arise due to the nature of the services we provide and the conditions in which we operate and can be due to failure of infrastructure on which we have performed services and result in significant liabilities that may be exacerbated in certain geographies and locations;
- Unexpected costs, liabilities, fines or penalties that may arise from legal proceedings, indemnity obligations, reimbursement obligations associated with letters of credit or bonds, multiemployer pension plans or other claims or actions asserted against us, including amounts that are not covered by, or are in excess of the coverage under, our third-party insurance;
- Potential unavailability or cancellation of third-party insurance coverage, as well as the exclusion of coverage for certain losses, potential increases in premiums for coverage deemed beneficial to us, or the unavailability of coverage deemed beneficial to us at reasonable and competitive rates (e.g., coverage for wildfire events);
- Damage to our brands or reputation, as well as potential costs, liabilities, fines or penalties, arising as a result of cyber-security breaches, environmental and occupational health and safety matters, corporate scandal, failure to successfully perform or negative publicity regarding a high-profile project, involvement in a catastrophic event (e.g., fire, explosion) or other negative incidents;
- Disruptions in, or failure to adequately protect, our information technology systems;
- Our dependence on suppliers, subcontractors, equipment manufacturers and other third parties and the impact of, among other things, inflationary pressure and regulatory, supply chain and logistical challenges on these third parties;
- Estimates and assumptions related to our financial results, remaining performance obligations and backlog;
- Our inability to attract, the potential shortage of, and increased costs with respect to skilled employees, as well as our ability to retain and attract key personnel and qualified employees;
- Our dependence on fixed price contracts and the potential that we incur losses with respect to these contracts;
- Cancellation provisions within our contracts and the risk that contracts expire and are not renewed or are replaced on less favorable terms;
- Our inability or failure to comply with the terms of our contracts, which may result in additional costs, unexcused delays, warranty claims, failure to meet performance guarantees, damages or contract terminations;
- Adverse weather conditions, natural disasters and other emergencies, including wildfires, pandemics, hurricanes, tropical storms, floods, debris flows, earthquakes and other geological- and weather-related hazards, as well as the impact of climate change;
- Our ability to generate internal growth;
- Competition in our business, including our ability to effectively compete for new projects and market share, as well as technological advancements and market developments that could reduce demand for our services;
- The failure of existing or potential legislative actions and initiatives to result in increased demand for our services or budgetary or other constraints that may reduce or eliminate tax incentives or government funding for projects, including renewable energy projects, which may result in project delays or cancellations;
- The unavailability of, or increased prices for, materials, equipment and consumables (such as fuel) used in our and our customers' businesses, including as a result of inflation, supply chain disruptions, governmental regulations on sourcing, the imposition of tariffs, duties, taxes or other assessments, and other changes in U.S. trade relationships with foreign countries;

- Loss of customers with whom we have long-standing or significant relationships;
- The potential that our participation in joint ventures or similar structures exposes us to liability or harm to our reputation as a result of acts or omissions by our partners;
- The inability or refusal of our customers or third-party contractors to pay for services, which could result in our inability to collect our outstanding receivables, failure to recover amounts billed to, or avoidance of certain payments received from, customers in bankruptcy or failure to recover on change orders or contract claims;
- Risks associated with operating in international markets and U.S. territories, including instability of governments, significant currency exchange fluctuations, and compliance with unfamiliar legal and labor systems and cultural practices, the U.S. Foreign Corrupt Practices Act and other applicable anti-bribery and anti-corruption laws, and complex U.S. and foreign tax regulations and international treaties;
- Our inability to successfully identify, complete, integrate and realize synergies from acquisitions, including the inability to retain key personnel from acquired businesses;
- The potential adverse impact of acquisitions and investments, including the potential increase in risks already existing in our operations, poor performance or decline in value of acquired businesses or investments and unexpected costs or liabilities that may arise from acquisitions or investments;
- The adverse impact of impairments of goodwill, other intangible assets, receivables, long-lived assets or investments;
- Difficulties arising from our decentralized management structure;
- The impact of the unionized portion of our workforce on our operations;
- An inability to access sufficient funding to finance desired growth and operations, including our ability to access capital markets on favorable terms, as well as fluctuations in the price and trading volume of our common stock, debt covenant compliance, interest rate fluctuations, a downgrade in our credit ratings and other factors affecting our financing and investing activities;
- Our ability to obtain bonds, letters of credit and other project security;
- Risks related to the implementation of new information technology systems;
- New or changed tax laws, treaties or regulations or the inability to realize deferred tax assets; and
- The other risks and uncertainties described elsewhere herein, including in Item 1A. *Risk Factors* of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022 (2022 Annual Report), and as may be detailed from time to time in our other public filings with the U.S. Securities and Exchange Commission (SEC).

All of our forward-looking statements, whether written or oral, are expressly qualified by these cautionary statements and any other cautionary statements that may accompany such forward-looking statements or that are otherwise included in this report. Although forward-looking statements reflect our good faith beliefs at the time they are made, reliance should not be placed on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by such forward-looking statements. In addition, we do not undertake and expressly disclaim any obligation to update or revise any forward-looking statements to reflect events or circumstances after the date of this report or otherwise.

PART I - FINANCIAL INFORMATION

Item 1. ***Financial Statements.***

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share information)
(Unaudited)

	June 30, 2023	December 31, 2022
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 361,966	$ 428,505
Accounts receivable, net	4,075,206	3,674,525
Contract assets	1,357,233	1,080,206
Inventories	156,505	103,265
Prepaid expenses and other current assets	371,482	249,569
Total current assets	6,322,392	5,536,070
Property and equipment, net	2,233,610	2,030,464
Operating lease right-of-use assets	241,814	229,691
Other assets, net	633,569	622,736
Other intangible assets, net	1,424,366	1,458,631
Goodwill	3,885,099	3,586,745
Total assets	$ 14,740,850	$ 13,464,337
LIABILITIES AND EQUITY		
Current Liabilities:		
Current maturities of long-term debt	$ 41,249	$ 37,495
Current portion of operating lease liabilities	76,648	74,052
Accounts payable and accrued expenses	2,516,908	2,153,129
Contract liabilities	1,128,864	1,141,518
Total current liabilities	3,763,669	3,406,194
Long-term debt, net of current maturities	4,216,522	3,692,432
Operating lease liabilities, net of current portion	181,705	171,512
Deferred income taxes	254,953	227,861
Insurance and other non-current liabilities	595,022	567,519
Total liabilities	9,011,871	8,065,518
Commitments and Contingencies		
Equity:		
Common stock, $0.00001 par value, 600,000,000 shares authorized, 173,586,323 and 170,638,525 shares issued, and 145,196,458 and 142,930,598 shares outstanding	2	2
Additional paid-in capital	2,903,628	2,718,988
Retained earnings	4,400,164	4,163,212
Accumulated other comprehensive loss	(285,660)	(310,677)
Treasury stock, 28,389,865 and 27,707,927 common shares	(1,297,201)	(1,188,061)
Total stockholders’ equity	5,720,933	5,383,464
Non-controlling interests	8,046	15,355
Total equity	5,728,979	5,398,819
Total liabilities and equity	$ 14,740,850	$ 13,464,337

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

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share information)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Revenues	$ 5,048,610	$ 4,232,003	$ 9,477,436	$ 8,197,528
Cost of services	4,324,511	3,607,413	8,180,142	7,024,767
Gross profit	724,099	624,590	1,297,294	1,172,761
Equity in earnings of integral unconsolidated affiliates	9,370	18,565	18,990	33,717
Selling, general and administrative expenses	(384,171)	(323,245)	(768,723)	(648,132)
Amortization of intangible assets	(70,025)	(107,945)	(142,428)	(223,696)
Asset impairment charges	—	(2,800)	—	(2,800)
Change in fair value of contingent consideration liabilities	—	(809)	—	(5,978)
Operating income	279,273	208,356	405,133	325,872
Interest and other financing expenses	(48,189)	(28,639)	(89,882)	(53,367)
Interest income	1,448	222	2,964	291
Other income (expense), net	3,419	(42,527)	11,285	(43,800)
Income before income taxes	235,951	137,412	329,500	228,996
Provision for income taxes	69,367	41,252	65,946	47,808
Net income	166,584	96,160	263,554	181,188
Less: Net income attributable to non-controlling interests	685	8,140	2,609	8,527
Net income attributable to common stock	$ 165,899	$ 88,020	$ 260,945	$ 172,661
Earnings per share attributable to common stock:				
Basic	$ 1.14	$ 0.61	$ 1.80	$ 1.20
Diluted	$ 1.12	$ 0.59	$ 1.75	$ 1.16
Shares used in computing earnings per share:				
Weighted average basic shares outstanding	145,422	143,851	144,947	143,697
Weighted average diluted shares outstanding	148,773	148,211	148,717	148,327

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

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net income	$ 166,584	$ 96,160	$ 263,554	$ 181,188
Other comprehensive income (loss), net of taxes:				
Foreign currency translation adjustment gain (loss)	23,917	(31,087)	24,226	(17,559)
Other income (loss)	—	192	791	(61)
Other comprehensive income (loss), net of taxes	23,917	(30,895)	25,017	(17,620)
Comprehensive income	190,501	65,265	288,571	163,568
Less: Comprehensive income attributable to non-controlling interests	685	8,140	2,609	8,527
Comprehensive income attributable to common stock	$ 189,816	$ 57,125	$ 285,962	$ 155,041

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

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Cash Flows from Operating Activities:		
Net income	$ 263,554	$ 181,188
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	158,258	144,913
Amortization of intangible assets	142,428	223,696
Equity in earnings of unconsolidated affiliates, net of distributions	22,830	(15,783)
Unrealized loss from mark-to-market adjustment on investment	—	50,047
Gain on sale of property and equipment	(11,900)	(3,456)
Non-cash stock-based compensation	62,058	51,082
Other non-cash adjustments, net	9,334	7,797
Changes in assets and liabilities, net of non-cash transactions:		
Accounts and notes receivable	(363,481)	(163,942)
Contract assets	(262,921)	(208,260)
Prepaid expenses and other current assets	(135,849)	(55,869)
Accounts payable and accrued expenses and other non-current liabilities	300,652	57,901
Contract liabilities	(13,625)	(50,404)
Other assets and liabilities, net	(5,516)	(15,089)
Net cash provided by operating activities	165,822	203,821
Cash Flows from Investing Activities:		
Capital expenditures	(185,597)	(231,511)
Proceeds from sale of and insurance settlements related to property and equipment	34,963	25,386
Cash paid for acquisitions, net of cash, cash equivalents and restricted cash acquired	(452,252)	(4,809)
Investments in unconsolidated affiliates and other	(5,626)	(16,653)
Proceeds from the sale or settlement of certain investments	42,277	16,905
Other, net	(1,132)	(336)
Net cash used in investing activities	(567,367)	(211,018)
Cash Flows from Financing Activities:		
Borrowings under credit facility and commercial paper program	9,885,534	2,889,372
Payments under credit facility and commercial paper program	(9,393,812)	(2,747,249)
Payments related to tax withholding for share-based compensation	(110,764)	(76,215)
Payments of dividends	(24,499)	(20,930)
Repurchase of common stock	—	(94,364)
Other, net	(20,165)	(21,530)
Net cash provided by (used in) financing activities	336,294	(70,916)
Effect of foreign exchange rate changes on cash, cash equivalents and restricted cash	349	(408)
Net decrease in cash, cash equivalents and restricted cash	(64,902)	(78,521)
Cash, cash equivalents and restricted cash, beginning of period	433,214	231,887
Cash, cash equivalents and restricted cash, end of period	$ 368,312	$ 153,366

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

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY
(In thousands, except share data)
(Unaudited)

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Stockholders' Equity	Non-Controlling Interests	Total Equity
	Shares	Amount							
Balance, December 31, 2022	142,930,598	$ 2	$ 2,718,988	$ 4,163,212	$ (310,677)	$ (1,188,061)	$ 5,383,464	$ 15,355	$ 5,398,819
Other comprehensive income	—	—	—	—	1,100	—	1,100	—	1,100
Acquisitions	1,018,946		123,503			—	123,503	—	123,503
Stock-based compensation activity	1,210,615	—	26,650	—	—	(104,247)	(77,597)	—	(77,597)
Dividends declared ($0.08 per share)	—	—	—	(12,100)	—	—	(12,100)	—	(12,100)
Distributions to non-controlling interests	—	—	—	—	—	—	—	(8,741)	(8,741)
Net income	—	—	—	95,046	—	—	95,046	1,924	96,970
Balance, March 31, 2023	145,160,159	$ 2	$ 2,869,141	$ 4,246,158	$ (309,577)	$ (1,292,308)	$ 5,513,416	$ 8,538	$ 5,521,954
Other comprehensive income	—	—	—	—	23,917	—	23,917	—	23,917
Stock-based compensation activity	36,299	—	34,487	—	—	(4,893)	29,594	—	29,594
Dividends declared ($0.08 per share)	—	—	—	(11,893)	—	—	(11,893)	—	(11,893)
Distributions to non-controlling interests	—	—	—	—	—	—	—	(1,177)	(1,177)
Net income	—	—	—	165,899	—	—	165,899	685	166,584
Balance, June 30, 2023	145,196,458	$ 2	$ 2,903,628	$ 4,400,164	$ (285,660)	$ (1,297,201)	$ 5,720,933	$ 8,046	$ 5,728,979

QUANTA SERVICES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY
(In thousands, except share data)
(Unaudited)

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Stockholders' Equity	Non-Controlling Interests	Total Equity
Balance, December 31, 2021	142,633,934	$ 2	$ 2,615,410	$ 3,714,843	$ (237,689)	$ (980,265)	$ 5,112,301	$ 4,620	$ 5,116,921
Other comprehensive income	—	—	—	—	13,275	—	13,275	—	13,275
Stock-based compensation activity	1,216,468	—	21,830	—	—	(73,643)	(51,813)	—	(51,813)
Common stock repurchases	(84,798)	—	—	—	—	(10,426)	(10,426)	—	(10,426)
Dividends declared ($0.07 per share)	—	—	—	(10,459)	—	—	(10,459)	—	(10,459)
Distributions to non-controlling interests	—	—	—	—	—	—	—	(538)	(538)
Net income	—	—	—	84,641	—	—	84,641	387	85,028
Balance, March 31, 2022	143,765,604	$ 2	$ 2,637,240	$ 3,789,025	$ (224,414)	$ (1,064,334)	$ 5,137,519	$ 4,469	$ 5,141,988
Other comprehensive loss	—	—	—	—	(30,895)	—	(30,895)	—	(30,895)
Stock-based compensation activity	46,105	—	28,046	—	—	(504)	27,542	—	27,542
Common stock repurchases	(731,381)	—	—	—	—	(84,884)	(84,884)	—	(84,884)
Dividends declared ($0.07 per share)	—	—	—	(10,283)	—	—	(10,283)	—	(10,283)
Distributions to non-controlling interests	—	—	—	—	—	—	—	(80)	(80)
Other	—	—	—	—	—	—	—	227	227
Net income	—	—	—	88,020	—	—	88,020	8,140	96,160
Balance, June 30, 2022	143,080,328	$ 2	$ 2,665,286	$ 3,866,762	$ (255,309)	$ (1,149,722)	$ 5,127,019	$ 12,756	$ 5,139,775

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

QUANTA SERVICES, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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1. BUSINESS AND ORGANIZATION, BASIS OF PRESENTATION AND ACCOUNTING POLICIES:

Quanta Services, Inc. (together with its subsidiaries, Quanta) is a leading provider of comprehensive infrastructure solutions for the electric and gas utility, renewable energy, communications, pipeline and energy industries in the United States, Canada, Australia and select other international markets.

These unaudited condensed consolidated financial statements have been prepared in accordance with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X for interim financial information. Certain information and footnote disclosures, normally included in annual financial statements prepared in accordance with generally accepted accounting principles in the United States (GAAP), have been condensed or omitted pursuant to those rules and regulations. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto of Quanta's Annual Report on Form 10-K for the year ended December 31, 2022. Quanta believes that the disclosures made are adequate to make the information presented not misleading. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, necessary to fairly state the financial position, results of operations, comprehensive income and cash flows with respect to the interim condensed consolidated financial statements have been included. The results of operations and comprehensive income for the interim periods are not necessarily indicative of the results for the entire fiscal year. The results of Quanta have historically been subject to significant seasonal fluctuations.

2. NEW ACCOUNTING PRONOUNCEMENTS:

Recently Adopted Guidance

In October 2021, the Financial Accounting Standards Board (FASB) issued an update that requires recognition and measurement of contract assets and contract liabilities acquired in a business combination in accordance with FASB ASC 606 (Revenue from Contracts with Customers). At the acquisition date, an acquirer should account for the related contract revenue in accordance with FASB ASC 606. This update is effective for interim and annual periods beginning after December 15, 2022, with amendments generally applied prospectively. Quanta adopted this update effective January 1, 2023, and it did not have a material impact on Quanta's consolidated financial statements.

New Accounting Pronouncement Not Yet Adopted

In June 2022, the FASB issued an update that clarifies the guidance in FASB ASC 820 (Fair Value Measurement) for equity securities subject to contractual sale restrictions. The update prohibits entities from taking into account contractual restrictions on the sale of equity securities when estimating fair value and introduces required disclosures for such transactions. This update is effective for interim and annual periods after December 15, 2023. Early adoption is permitted. This guidance will increase the fair market value of the consideration paid in equity securities in a business combination, and therefore it may increase the amount allocated to goodwill. Quanta will adopt this update by January 1, 2024, and it is not expected to have a material impact on Quanta's consolidated financial statements.

3. REVENUE RECOGNITION AND RELATED BALANCE SHEET ACCOUNTS:

Contracts

Certain of Quanta's services are generally provided pursuant to master service agreements (MSAs), repair and maintenance contracts and fixed price and non-fixed price construction contracts. These contracts are classified into three categories: unit-price contracts, cost-plus contracts and fixed price contracts.

The following tables present Quanta's revenue disaggregated by contract type and by geographic location, as determined by the job location (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
By contract type:								
Fixed price contracts	$ 2,296,888	45.5 %	$ 1,805,156	42.7 %	4,231,776	44.7 %	$ 3,494,791	42.6 %
Unit-price contracts	1,697,629	33.6	1,451,905	34.3	3,195,023	33.7	$ 2,809,507	34.3
Cost-plus contracts	1,054,093	20.9	974,942	23.0	2,050,637	21.6	1,893,230	23.1
Total revenues	$ 5,048,610	100.0 %	$ 4,232,003	100.0 %	$ 9,477,436	100.0 %	$ 8,197,528	100.0 %

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
By primary geographic location:								
United States	$ 4,282,902	84.8 %	$ 3,667,337	86.7 %	$ 7,949,267	83.9 %	$ 6,991,306	85.2 %
Canada	523,258	10.4	439,466	10.4	1,065,618	11.2	990,371	12.1
Australia	156,725	3.1	89,369	2.1	311,402	3.3	144,570	1.8
Others	85,725	1.7	35,831	0.8	151,149	1.6	71,281	0.9
Total revenues	$ 5,048,610	100.0 %	$ 4,232,003	100.0 %	$ 9,477,436	100.0 %	$ 8,197,528	100.0 %

Under fixed-price contracts, as well as unit-price contracts with more than an insignificant amount of partially completed units, revenue is recognized as performance obligations are satisfied over time, with the percentage completion generally measured as the percentage of costs incurred to total estimated costs for such performance obligation. Approximately 54.0% and 51.7% of Quanta's revenues recognized during the three months ended June 30, 2023 and 2022 were associated with this revenue recognition method, and 52.4% and 51.5% of Quanta's revenues recognized during the six months ended June 30, 2023 and 2022 were associated with this revenue recognition method.

Performance Obligations

As of June 30, 2023 and December 31, 2022, the aggregate transaction price allocated to unsatisfied or partially satisfied performance obligations was approximately $12.48 billion and $8.80 billion, with 70.7% and 72.1% expected to be recognized in the subsequent twelve months. These amounts represent management's estimates of the consolidated revenues that are expected to be realized from the remaining portion of firm orders under fixed price contracts not yet completed or for which work had not yet begun as of such dates. For purposes of calculating remaining performance obligations, Quanta includes all estimated revenues attributable to consolidated joint ventures and variable interest entities, revenues from funded and unfunded portions of government contracts to the extent they are reasonably expected to be realized, and revenues from change orders and claims to the extent management believes additional contract revenues will be earned and are deemed probable of collection. Excluded from remaining performance obligations are potential orders under MSAs and non-fixed price contracts expected to be completed within one year.

Contract Estimates and Changes in Estimates

Actual revenues and project costs can vary, sometimes substantially, from previous estimates due to changes in a variety of factors, including unforeseen or changed circumstances not included in Quanta's cost estimates or covered by its contracts. Some of the factors that can result in positive changes in estimates on projects include successful execution through project risks, reduction of estimated project costs or increases of estimated revenues. Some of the factors that can result in negative changes in estimates include concealed or unknown site conditions; changes to or disputes with customers regarding the scope of services; changes in estimates related to the length of time to complete a performance obligation; changes or delays with respect to permitting and regulatory requirements and materials; changes in the cost of equipment, commodities, materials or skilled labor; unanticipated costs or claims due to delays or failure to perform by customers or third parties; customer failure to provide required materials or equipment; errors in engineering, specifications or designs; project modifications; adverse weather conditions, natural disasters, and other emergencies; and performance and quality issues causing delay (including payment of liquidated damages) or requiring rework or replacement. Any changes in estimates could result in changes to profitability or losses associated with the related performance obligations.

Additionally, changes in cost estimates on certain contracts may result in the issuance of change orders, which can be approved or unapproved by the customer, or the assertion of contract claims. Quanta recognizes amounts associated with change orders and claims as revenue if it is probable that the contract price will be adjusted and the amount of any such adjustment can be reasonably estimated.

As of June 30, 2023 and December 31, 2022, Quanta had recognized revenues of $745.1 million and $549.3 million related to change orders and claims included as contract price adjustments primarily in "Contract assets" in the accompanying consolidated balance sheets. These change orders and claims were in the process of being negotiated in the normal course of business and represent management's estimates of additional contract revenues that have been earned and are probable of collection.

The largest component of the revenues recognized related to change orders and claims as of June 30, 2023 and of the increase relative to December 31, 2022 is associated with a large renewable transmission project in Canada. During 2021 and 2022, decreased productivity and additional costs arose from delays, administrative requirements and labor issues due to the COVID-19 pandemic, including incremental governmental requirements and worksite restrictions. During the six months ended June 30, 2023, additional costs arose from residual impacts associated with such delays, administrative requirements and labor issues due to the COVID-19 pandemic, including work resequencing and acceleration, access delays, and logistical challenges along with other issues outside of Quanta's control.

Changes in estimates can result in the recognition of revenue in a current period for performance obligations that were satisfied or partially satisfied in prior periods or the reversal of previously recognized revenue if the currently estimated revenue is less than the previous estimate. The impact of a change in contract estimate is measured as the difference between the revenue or gross profit recognized in the prior period as compared to the revenue or gross profit which would have been recognized had the revised estimate been used as the basis of recognition in the prior period. Changes in estimates can also result in contract losses, which are recognized in full when they are determined to be probable and can be reasonably estimated.

Revenues were positively impacted by 0.7% and 1.5% during the three months ended June 30, 2023 and 2022 as a result of changes in estimates associated with performance obligations on fixed price contracts partially satisfied prior to March 31, 2023 and 2022. Revenues were positively impacted by 0.3% and 1.0% during the six months ended June 30, 2023 and 2022 as a result of changes in estimates associated with performance obligations on fixed price contracts partially satisfied prior to December 31, 2022 and 2021.

Operating results for the three months ended June 30, 2023 were impacted by less than 5% of gross profit as a result of aggregate changes in contract estimates related to projects that were in progress as of March 31, 2023. There were no material changes in estimates on any individual project.

Operating results for the six months ended June 30, 2023 were impacted by less than 5% of gross profit as a result of aggregate changes in contract estimates related to projects that were in progress as of December 31, 2022. However, Quanta's large renewable transmission project in Canada was negatively impacted by $20.7 million due to changes to estimated project costs during this period, as mentioned above.

Operating results for the three months ended June 30, 2022 were favorably impacted by $62.3 million, or 10.0%, of gross profit as a result of aggregate changes in contract estimates related to projects that were in progress as of March 31, 2022. The overall favorable impact resulted from net positive changes in estimates across a large number of projects, primarily as a result of favorable performance and successful mitigation of risks and contingencies as the projects progressed to completion. Partially offsetting the aggregate net favorable impact to gross profit was a negative change in estimate of $13.0 million for the three months ended June 30, 2022, associated with the large renewable transmission project in Canada, described above.

Operating results for the six months ended June 30, 2022 were favorably impacted by $72.7 million, or 6.2% of gross profit as a result of aggregate changes in contract estimates related to projects that were in progress at December 31, 2021. The overall favorable impact resulted from net positive changes in estimates across a large number of projects, primarily as a result of favorable performance and successful mitigation of risks and contingencies as the projects progressed to completion. Partially offsetting the aggregate net favorable impact to gross profit was a negative change in estimate of $23.7 million for the six months ended June 30, 2022, associated with the large renewable transmission project in Canada, described above.

Contract Assets and Liabilities

Contract assets and liabilities consisted of the following (in thousands):

	June 30, 2023	December 31, 2022
Contract assets	$ 1,357,233	$ 1,080,206
Contract liabilities	$ 1,128,864	$ 1,141,518

Contract assets and liabilities fluctuate period to period based on various factors, including, among others, changes in the number and size of projects in progress at period end; variability in billing and payment terms, such as up-front or advance billings, interim or milestone billings, or deferred billings; and unapproved change orders and contract claims recognized as revenues. The increase in contract assets from December 31, 2022 to June 30, 2023 was primarily due to additional unapproved change orders and claims related to the large renewable transmission project in Canada described above, as well as progress on other projects on which the timing of billings lagged behind the completion of work.

During the six months ended June 30, 2023, Quanta recognized revenue of approximately $897.8 million related to contract liabilities outstanding as of the end of the prior year.

Accounts Receivable, Allowance for Credit Losses and Concentrations of Credit Risk

Quanta determines its allowance for credit losses based on an estimate of expected credit losses for financial instruments, primarily accounts receivable and contract assets. The assessment of the allowance for credit losses involves certain judgments and estimates. Management estimates the allowance balance using relevant available information from internal and external sources relating to past events, current conditions and reasonable and supportable forecasts. Expected credit losses are estimated by evaluating trends in historical write-off experience and applying historical loss ratios to pools of financial assets with similar risk characteristics.

Quanta's historical loss ratio and its determination of its risk pools, which are used to calculate expected credit losses, may be adjusted for changes in customer credit concentrations within its portfolio of financial assets, its customers' ability to pay, and other considerations, such as economic and market changes, changes to regulatory or technological environments affecting customers and the consistency between current and forecasted economic conditions and historical economic conditions used to derive historical loss ratios. At the end of each quarter, management reassesses these and other relevant factors, including the impact of uncertainty and challenges in the overall economy and in Quanta's industries and markets, which currently include inflationary pressure, supply chain and other logistical challenges and increased interest rates.

Additional allowance for credit losses is established for financial asset balances with specific customers where collectability has been determined to be improbable based on customer specific facts and circumstances. Quanta considers accounts receivable delinquent after 30 days but, absent certain specific considerations, generally does not consider such amounts delinquent in its credit loss analysis unless the accounts receivable are at least 120 days outstanding. In addition, management monitors the credit quality of its receivables by, among other things, obtaining credit ratings for significant customers, assessing economic and market conditions and evaluating material changes to a customer's business, cash flows and financial condition. Should anticipated recoveries relating to receivables fail to materialize, including anticipated recoveries relating to bankruptcies or other workout situations, Quanta could experience reduced cash flows and losses in excess of current allowances provided.

Accounts receivable are written-off against the allowance for credit losses if they are deemed uncollectible.

Activity in Quanta's allowance for credit losses consisted of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Balance at beginning of period	$ 16,530	$ 49,916	$ 15,644	$ 49,749
Increase in provision for credit losses	2,889	(428)	5,247	(295)
Write-offs charged against the allowance net of recoveries of amounts previously written off	(5,511)	219	(6,983)	253
Balance at end of period	$ 13,908	$ 49,707	$ 13,908	$ 49,707

Provision for credit losses is included in "Selling, general and administrative expenses" in the consolidated statements of operations.

Quanta is subject to concentrations of credit risk related primarily to its receivable position with customers, which includes amounts related to billed and unbilled accounts receivable and contract assets for services Quanta has performed for customers. Quanta grants credit under normal payment terms, generally without collateral. One customer within the Renewable Energy Infrastructure Solutions segment associated with the large renewable transmission project in Canada described above represented 15% and 13% of Quanta's consolidated receivable position as of June 30, 2023 and December 31, 2022. No customer represented 10% or more of Quanta's consolidated revenues for the three or six months ended June 30, 2023 or 2022.

Certain contracts allow customers to withhold a small percentage of billings pursuant to retainage provisions, and such amounts are generally due upon completion of the contract and acceptance of the project by the customer. Based on Quanta's experience in recent years, the majority of these retainage balances are expected to be collected within one year. Retainage balances with expected settlement dates within one year of June 30, 2023 and December 31, 2022 were $483.9 million and $397.6 million, which are included in "Accounts receivable." Retainage balances with expected settlement dates beyond one year were $147.8 million and $136.2 million as of June 30, 2023 and December 31, 2022 and are included in "Other assets, net."

Quanta recognizes unbilled receivables for non-fixed price contracts within "Accounts receivable" in certain circumstances, such as when revenues have been earned and recorded but the amount cannot be billed under the terms of the contract until a later date or when amounts arise from routine lags in billing. These balances do not include revenues recognized for work performed under fixed-price contracts and unit-price contracts with more than an insignificant amount of partially completed units, as these amounts are recorded as "Contract assets." As of June 30, 2023 and December 31, 2022, unbilled receivables included in "Accounts receivable" were $929.4 million and $823.9 million. The increase in unbilled receivables was primarily due to significant increases in work and certain delays in billing related to certain large customers. Quanta also recognizes unearned revenues for non-fixed price contracts when cash is received prior to recognizing revenues for the related performance obligation. Unearned revenues, which are included in "Accounts payable and accrued expenses," were $61.6 million and $59.6 million as of June 30, 2023 and December 31, 2022.

4. SEGMENT INFORMATION:

Quanta reports its results under three reportable segments described below:

- *Electric Power Infrastructure Solutions (Electric Power).* Quanta's Electric Power segment provides comprehensive services for the electric power and communications markets.
- *Renewable Energy Infrastructure Solutions (Renewable Energy).* Quanta's Renewable Energy segment provides comprehensive infrastructure solutions to customers that are involved in the renewable energy industry.

- *Underground Utility and Infrastructure Solutions (Underground and Infrastructure).* Quanta's Underground and Infrastructure segment provides comprehensive infrastructure solutions to customers involved in the transportation, distribution, storage, development and processing of natural gas, oil and other products.

Corporate and Non-allocated Costs include corporate facility costs; non-allocated corporate salaries, benefits and incentive compensation; acquisition and integration costs; non-cash stock-based compensation; amortization related to intangible assets; asset impairment related to goodwill and intangible assets; and change in fair value of contingent consideration liabilities.

The following table sets forth segment revenues and segment operating income (loss) and operating margins for the three and six months ended June 30, 2023 and 2022. Operating margin is calculated by dividing operating income (loss) by revenues. The following table shows dollars in thousands:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
Revenues:								
Electric Power Infrastructure Solutions	$ 2,415,254	47.9 %	$ 2,199,430	52.0 %	$ 4,751,291	50.1 %	$ 4,338,127	52.9 %
Renewable Energy Infrastructure Solutions	1,389,368	27.5	924,236	21.8	2,397,668	25.3	1,799,868	22.0
Underground Utility and Infrastructure Solutions	1,243,988	24.6	1,108,337	26.2	2,328,477	24.6	2,059,533	25.1
Consolidated revenues	$ 5,048,610	100.0 %	$ 4,232,003	100.0 %	$ 9,477,436	100.0 %	$ 8,197,528	100.0 %
Operating income (loss):								
Electric Power Infrastructure Solutions [(1)]	$ 244,017	10.1 %	$ 232,150	10.6 %	$ 459,166	9.7 %	$ 435,569	10.0 %
Renewable Energy Infrastructure Solutions	110,487	8.0 %	81,687	8.8 %	146,143	6.1 %	151,629	8.4 %
Underground Utility and Infrastructure Solutions	107,207	8.6 %	89,943	8.1 %	168,780	7.2 %	138,118	6.7 %
Corporate and Non-Allocated Costs [(2)]	(182,438)	(3.6)%	(195,424)	(4.6)%	(368,956)	(3.9)%	(399,444)	(4.9)%
Consolidated operating income	$ 279,273	5.5 %	$ 208,356	4.9 %	$ 405,133	4.3 %	$ 325,872	4.0 %

(1) Includes equity in earnings of integral unconsolidated affiliates of $9.4 million and $18.6 million for the three months ended June 30, 2023 and 2022 and $19.0 million and $33.7 million for the six months ended June 30, 2023 and 2022, primarily related to Quanta's equity interest in LUMA Energy, LLC (LUMA).

(2) Includes amortization expense of $70.0 million and $107.9 million and non-cash stock-based compensation of $34.6 million and $28.1 million for the three months ended June 30, 2023 and 2022. Includes amortization expense of $142.4 million and $223.7 million and non-cash stock-based compensation of $62.1 million and $51.1 million for the six months ended June 30, 2023 and 2022.

Depreciation Expense Allocation

Separate measures of Quanta's assets and cash flows by reportable segment, including capital expenditures, are not produced or utilized by management to evaluate segment performance. Quanta's fixed assets are generally used on an interchangeable basis across its reportable segments. As such, for reporting purposes, total depreciation expense is allocated each quarter among Quanta's reportable segments based on the ratio of each reportable segment's revenue contribution to consolidated revenues. The following table shows dollars in thousands:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Depreciation:				
Electric Power Infrastructure Solutions	$ 41,357	$ 36,781	$ 83,442	$ 73,560
Renewable Energy Infrastructure Solutions	10,681	10,178	21,539	18,411
Underground Utility and Infrastructure Solutions	19,135	20,667	39,635	41,605
Corporate and Non-Allocated Costs	8,703	6,333	13,642	11,337
Consolidated depreciation	$ 79,876	$ 73,959	$ 158,258	$ 144,913

5. ACQUISITIONS:

The results of operations of acquired businesses have been included in Quanta's consolidated financial statements since their respective acquisition dates.

In January 2023, Quanta acquired three businesses located in the United States including: a business that provides services related to high-voltage transmission lines, overhead and underground distribution, emergency restoration and industrial and commercial wiring and lighting (primarily included in the Electric Power segment); a business that procures parts, assembles kits for sale, manages logistics and installs solar tracking equipment for utility and development customers (primarily included in the Renewable Energy segment); and a business that provides concrete construction services (primarily included in the Electric Power and Renewable Energy segments). The consideration for these transactions consisted of approximately $463.5 million paid or payable in cash (subject to certain adjustments) and 1,018,946 shares of Quanta common stock, which had a fair value of $123.5 million as of the dates of the acquisitions.

In July 2022, Quanta acquired a business located in the United States that provides construction contracting services to utilities, specializing in trenching and underground pipeline and electrical conduit installation, primarily included in the Electric Power segment. The consideration for this transaction included $22.3 million paid or payable in cash (subject to certain adjustments). Additionally, the former owners of this business are eligible to receive a potential payment of contingent consideration to the extent the acquired business achieves certain financial performance targets over a five-year post-acquisition period.

Purchase Price Allocation

Quanta is finalizing its purchase price allocations related to businesses acquired in 2023, and further adjustments to the purchase price allocations may occur, with possible updates primarily related to tax estimates and the finalization of closing working capital adjustments. The aggregate consideration paid or payable for businesses acquired between June 30, 2022 and June 30, 2023 was allocated to acquired assets and assumed liabilities, which resulted in an allocation of $184.8 million to net tangible assets, $120.5 million to identifiable intangible assets and $306.6 million to goodwill.

The following table summarizes the fair value of total consideration transferred or estimated to be transferred and the fair value of assets acquired and liabilities assumed as of their respective acquisition dates as of June 30, 2023 for acquisitions completed in the six months ended June 30, 2023 (in thousands):

	Six Months Ended June 30, 2023
Consideration:	
Cash paid or payable	$ 463,482
Value of Quanta common stock issued	123,503
Fair value of total consideration transferred or estimated to be transferred	$ 586,985
Cash and cash equivalents	$ 14,832
Accounts receivable	46,389
Contract assets	195
Inventories	56,960
Prepaid expenses and other current assets	4,392
Property and equipment	144,217
Operating lease assets	14,189
Other assets	4,553
Identifiable intangible assets	107,430
Accounts payable and accrued liabilities	(61,739)
Contract liabilities	(3,071)
Operating lease liabilities, current	(2,552)
Deferred tax liabilities, net	(20,556)
Operating lease liabilities, non-current	(12,242)
Total identifiable net assets	292,997
Goodwill	293,988
Fair value of net assets acquired	$ 586,985

As of June 30, 2023, approximately $238.2 million of goodwill is expected to be deductible for income tax purposes related to acquisitions completed in the six months ended June 30, 2023.

The following table summarizes the estimated fair values of identifiable intangible assets for the acquisitions completed in the six months ended June 30, 2023 as of the acquisition dates and the related weighted average amortization periods by type (in thousands, except for weighted average amortization periods, which are in years).

	Six Months Ended June 30, 2023	
	Estimated Fair Value	Weighted Average Amortization Period in Years
Customer relationships	$ 79,240	4.6
Backlog	11,095	0.9
Trade names	12,615	15.0
Non-compete agreements	4,480	5.0
Total intangible assets subject to amortization	$ 107,430	5.5

The significant estimates used by management in determining the fair values of customer relationship intangible assets include future revenues, discount rates and customer attrition rates.The following table includes the discount rates and customer attrition rates used to determine the fair value of customer relationship intangible assets for businesses acquired during the six months ended June 30, 2023 as of the respective acquisition dates:

	Six Months Ended June 30, 2023	
	Range	Weighted Average
Discount rates	15% to 19%	17%
Customer attrition rates	10% to 20%	18%

Contingent Consideration

As described above, certain business acquisitions have contingent consideration liabilities associated with the transactions.The aggregate fair value of these outstanding contingent consideration liabilities and their classification in the accompanying consolidated balance sheets is as follows (in thousands):

	June 30, 2023	December 31, 2022
Accounts payable and accrued expenses	$ —	$ 5,000
Insurance and other non-current liabilities	143,517	143,517
Total contingent consideration liabilities	$ 143,517	$ 148,517

The fair value determinations of contingent consideration liabilities incorporate significant inputs not observable in the market. Accordingly, the level of inputs used for these fair value measurements is Level 3. The following table includes the volatility factors, weighted average costs of capital and discount rates used to determine the fair value of contingent consideration liabilities during the six months ended June 30, 2023:

	Six Months Ended June 30, 2023	
	Range	Weighted Average
Volatility factors	35.0% to 43.0%	35.2%
Weighted average cost of capital	14.0% to 15.50%	14.0%
Discount rates	4.06% to 6.90%	6.5%

Quanta's outstanding contingent consideration liabilities are subject to a maximum payment amount, and the aggregate maximum payment amount of these liabilities totaled $321.8 million as of June 30, 2023. During the six months ended June 30, 2023 and 2022, Quanta settled certain contingent consideration liabilities with cash payments of $5.0 million and $1.6 million.

Pro Forma Results of Operations

The following unaudited supplemental pro forma results of operations for Quanta, which incorporate the acquisitions completed in the six months ended June 30, 2023 and the year ended December 31, 2022, have been provided for illustrative purposes only and may not be indicative of the actual results that would have been achieved by the combined companies for the periods presented or that may be achieved by the combined companies in the future (in thousands).

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Revenues	$ 5,048,610	$ 4,358,240	$ 9,477,436	$ 8,450,003
Net income attributable to common stock	$ 165,899	$ 88,671	$ 260,945	$ 173,129

The pro forma combined results of operations for the three and six months ended June 30, 2023 and 2022 were prepared by adjusting the historical results of Quanta to include the historical results of the businesses acquired in 2023 as if such acquisitions had occurred January 1, 2022. The pro forma combined results of operations for the three and six months ended June 30, 2022 were prepared by adjusting the historical results of Quanta to include the historical results of the business acquired in 2022 as if such acquisition had occurred January 1, 2021. These pro forma combined historical results were adjusted for the following: a reduction of interest and other financing expenses as a result of the repayment of outstanding indebtedness of the acquired businesses; an increase in interest and other financing expenses as a result of the cash consideration paid; an increase in amortization expense due to the intangible assets recorded; elimination of inter-company sales; and changes in depreciation expense to adjust acquired property and equipment to the acquisition date fair value and to conform with Quanta's accounting policies. The pro forma combined results of operations do not include any adjustments to eliminate the impact of acquisition-related costs incurred by Quanta or any cost savings or other synergies that resulted or may result from the acquisitions.

Results of Operations

Revenues of $143.1 million and income before income taxes of $12.9 million, which includes $6.4 million of amortization expense and no acquisition-related costs, related to the acquisitions completed in 2023 are included in Quanta's condensed consolidated results of operations for the three months ended June 30, 2023. Revenues of $236.6 million and a loss before income taxes of $3.2 million, which includes $15.0 million of amortization expense and $17.8 million of acquisition-related costs, related to the acquisitions completed in 2023 are included in Quanta's condensed consolidated results of operations for the six months ended June 30, 2023.

6. INVESTMENTS IN AFFILIATES AND OTHER ENTITIES:

Equity Investments

The following table presents Quanta's equity investments by type (in thousands):

	June 30, 2023	December 31, 2022
Equity method investments - integral unconsolidated affiliates	$ 95,550	$ 101,251
Equity method investments - non-integral unconsolidated affiliates	28,588	55,833
Marketable equity securities	—	—
Non-marketable equity securities	53,624	54,134
Total equity investments	$ 177,762	$ 211,218

Equity Method Investments

During the three months ended December 31, 2022, Quanta entered into an agreement to sell one of its non-integral equity method investments. The transaction was subject to certain customary closing conditions that were satisfied in early 2023. As a result, a $25.9 million gain was recognized in the fourth quarter of 2022, $10.4 million of which was attributable to non-controlling interests. During the six months ended June 30, 2023, Quanta received cash of $58.5 million related to the sale of this investment, $9.8 million of which was distributed to non-controlling interests.

As of June 30, 2023 and December 31, 2022, Quanta had receivables of $87.5 million and $96.9 million from its integral affiliates and payables of $11.6 million and $9.3 million to its integral affiliates. Quanta recognizes revenues from services provided to its integral affiliates, primarily for services provided to LUMA at cost. Quanta recognized revenues from such services to its integral affiliates of $50.2 million and $26.4 million during the three months ended June 30, 2023 and 2022 and $98.5 million and $51.5 million during the six months ended June 30, 2023 and 2022. In addition, during the three months ended June 30, 2023 and 2022, Quanta recognized costs of sales of $21.2 million and $21.9 million for services provided by other integral affiliates. During the six months ended June 30, 2023 and 2022, Quanta recognized costs of sales of $33.2 million and $72.3 million for services provided by other integral affiliates.

Total equity in earnings from integral unconsolidated affiliates was $9.4 million and $18.6 million for the three months ended June 30, 2023 and 2022, and $19.0 million and $33.7 million for the six months ended June 30, 2023 and 2022. Total equity in earnings from non-integral unconsolidated affiliates was earnings of $0.5 million and earnings of $9.6 million for the three months ended June 30, 2023 and 2022 and earnings of $2.1 million and $14.9 million for the six months ended June 30, 2023 and 2022 and was included in "Other income (expense), net" in the accompanying condensed consolidated statements of income. As of June 30, 2023, retained earnings included $16.6 million related to the undistributed earnings of unconsolidated affiliates.

Marketable Equity Securities

As of June 30, 2023 and December 31, 2022, the fair value of Quanta's investment in equity securities of Starry Group Holdings, Inc. (Starry), which is accounted for as a marketable security, was zero, which included an unrealized loss related to these securities of $91.5 million.

7. PER SHARE INFORMATION:

The amounts used to compute basic and diluted earnings per share attributable to common stock consisted of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Amounts attributable to common stock:				
Net income attributable to common stock	$ 165,899	$ 88,020	$ 260,945	$ 172,661
Weighted average shares:				
Weighted average shares outstanding for basic earnings per share attributable to common stock	145,422	143,851	144,947	143,697
Effect of dilutive unvested non-participating stock-based awards	3,351	4,360	3,770	4,630
Weighted average shares outstanding for diluted earnings per share attributable to common stock	148,773	148,211	148,717	148,327

8. DEBT OBLIGATIONS:

Quanta's long-term debt obligations consisted of the following (in thousands):

	June 30, 2023	December 31, 2022
0.950% Senior Notes due October 2024	$ 500,000	$ 500,000
2.900% Senior Notes due October 2030	1,000,000	1,000,000
2.350% Senior Notes due January 2032	500,000	500,000
3.050% Senior Notes due October 2041	500,000	500,000
Borrowings under senior credit facility (including Term Loan)	958,065	786,910
Borrowings under commercial paper program	699,200	373,000
Other long-term debt	97,117	92,907
Finance leases	28,367	3,542
Unamortized discount and financing costs	(24,978)	(26,432)
Total long-term debt obligations	4,257,771	3,729,927
Less — Current maturities of long-term debt	41,249	37,495
Total long-term debt obligations, net of current maturities	$ 4,216,522	$ 3,692,432

Senior Notes

The interest amounts due on Quanta's senior notes on each payment date are set forth below (dollars in thousands):

Title of the Notes	Interest Amount	Payment Dates	Commencement Date
0.950% Senior Notes due October 2024	$ 2,375	April 1 and October 1	April 1, 2022
2.900% Senior Notes due October 2030	$ 14,500	April 1 and October 1	April 1, 2021
2.350% Senior Notes due January 2032	$ 5,875	January 15 and July 15	July 15, 2022
3.050% Senior Notes due October 2041	$ 7,625	April 1 and October 1	April 1, 2022

The fair value of Quanta's senior notes was $2.06 billion as of June 30, 2023, compared to a carrying value of $2.48 billion net of unamortized bond discount, underwriting discounts and deferred financing costs of $22.1 million. The fair value of the senior notes is based on the quoted market prices for the same issue, and the senior notes are categorized as Level 1 liabilities.

Senior Credit Facility

The credit agreement for Quanta's senior credit facility (as amended, the credit agreement) provides for a $750.0 million term loan facility and aggregate revolving commitments of $2.64 billion, with a maturity date of October 8, 2026. Borrowings under the senior credit facility and the applicable interest rates were as follows (dollars in thousands):

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Maximum amount outstanding	$ 987,348	$ 1,597,744
Average daily amount outstanding	$ 909,662	$ 1,361,728
Weighted-average interest rate	6.22 %	2.04 %

As of June 30, 2023, Quanta was in compliance with all of the financial covenants under the credit agreement.

Term Loan. As of June 30, 2023, Quanta had $740.6 million outstanding under its term loan facility. The carrying amount of the term loan under Quanta's senior credit facility approximates fair value due to its variable interest rate.

Revolving Loans. As of June 30, 2023, Quanta had $217.4 million of outstanding revolving loans under the senior credit facility, all of which were denominated in Canadian dollars. The carrying amounts of the revolving borrowings under Quanta's senior credit facility approximate fair value, as all revolving borrowings have a variable interest rate.

As of June 30, 2023, Quanta also had $312.7 million of letters of credit issued under the senior credit facility, of which $223.2 million were denominated in U.S. dollars and $89.5 million were denominated in currencies other than the U.S. dollar, primarily Australian and Canadian dollars. Additionally, available commitments for revolving loans under the senior credit facility must be maintained in order to provide credit support for notes issued under Quanta's commercial paper program, and therefore such notes effectively reduce the available borrowing capacity under the senior credit facility.

As of June 30, 2023, $1.41 billion remained available under the senior credit facility for new revolving loans, letters of credit and support of the commercial paper program.

Deferred Financing Costs. As of June 30, 2023 and December 31, 2022, capitalized deferred financing costs, net of accumulated amortization, related to Quanta's revolving loans under its senior credit facility and commercial paper program were $7.2 million and $8.3 million and are included in "Other assets, net" in the accompanying condensed consolidated balance sheets. Amortization of deferred financing costs for all debt instruments is included in interest and other financing expenses and was $1.5 million and $1.5 million for the three months ended June 30, 2023 and 2022, and $3.0 million and $2.9 million for the six months ended June 30, 2023 and 2022.

Commercial Paper Program

Quanta had $699.2 million of outstanding notes under its unsecured commercial paper program as of June 30, 2023, with a weighted average interest rate of 5.95% and a weighted average maturity of 21 days as of such date. The carrying amounts of the notes issued under Quanta's commercial paper program approximate fair value, as all notes currently have a short maturity.

Borrowings under the commercial paper program and the applicable interest rates were as follows (dollars in thousands):

	Six Months Ended June 30, 2023
Maximum amount outstanding	$ 841,400
Average daily amount outstanding	$ 622,756
Weighted-average interest rate	5.64 %

Additional Letters of Credit

As of June 30, 2023 Quanta had $212.8 million of surety-backed letters of credit issued outside of its senior credit facility, which were denominated in U.S. dollars.

9. LEASES:

Quanta primarily leases land, buildings, vehicles, construction equipment and office equipment. The components of lease costs in the accompanying condensed consolidated statements of operations are as follows (in thousands):

Lease cost	Classification	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Finance lease cost:					
Amortization of lease assets	Depreciation (1)	$ 1,102	$ 436	$ 2,013	$ 876
Interest on lease liabilities	Interest and other financing expenses	299	28	507	55
Operating lease cost	Cost of services and Selling, general and administrative expenses	23,140	24,248	46,363	49,125
Short-term and variable lease cost (2)	Cost of services and Selling, general and administrative expenses	249,868	224,088	487,946	443,387
Total lease cost		$ 274,409	$ 248,800	$ 536,829	$ 493,443

(1) Depreciation is included within "Cost of services" and "Selling, general and administrative expenses" in the accompanying condensed consolidated statements of operations.
(2) Short-term lease cost includes both leases and rentals with initial terms of one year or less. Variable lease cost is insignificant.

Related party lease expense was $3.9 million and $3.8 million for the three months ended June 30, 2023 and 2022 and $7.8 million and $7.4 million for the six months ended June 30, 2023 and 2022.

Future minimum lease payments for operating leases, finance leases and lease financing transactions were as follows (in thousands):

	As of June 30, 2023			
	Operating Leases	Finance Leases	Lease Financing Transactions	Total
Remainder of 2023	$ 45,285	$ 1,488	$ 8,361	$ 55,134
2024	75,927	6,504	15,573	98,004
2025	59,264	6,477	13,831	79,572
2026	43,129	6,219	14,369	63,717
2027	27,812	5,691	11,756	45,259
Thereafter	29,696	3,452	25,161	58,309
Total future minimum payments related to operating leases, finance leases and lease financing transactions	281,113	29,831	89,051	399,995
Less imputed interest	(22,760)	(1,464)	—	(24,224)
Total operating lease, finance lease and lease financing transaction liabilities	$ 258,353	$ 28,367	$ 89,051	$ 375,771

Future minimum lease payments for short-term leases were $19.6 million as of June 30, 2023.

The weighted average remaining lease terms and discount rates were as follows:

	As of June 30, 2023
Weighted average remaining lease term (in years):	
Operating leases	4.26
Finance leases	5.60
Weighted average discount rate:	
Operating leases	3.9 %
Finance leases	6.1 %

Quanta has also guaranteed the residual value under certain of its equipment operating leases and real estate finance leases, agreeing to pay any difference between the residual value and the fair market value of the underlying asset at the date of lease termination. Historically, the fair value of the assets at the time of lease termination generally has approximated or exceeded the residual value guarantees, and therefore such guarantees are not expected to result in significant payments.

10. INCOME TAXES:

Quanta's effective tax rates for the three months ended June 30, 2023 and 2022 were 29.4% and 30.0%. Quanta's effective tax rates for the six months ended June 30, 2023 and 2022 were 20.0% and 20.9%. The tax rates for the six months ended June 30, 2023 and 2022 were favorably impacted by the recognition of $32.4 million and $21.2 million of benefits that resulted from equity incentive awards vesting at a higher fair market value than their grant date fair value. The effective tax rates for the three and six months ended June 30, 2022 were unfavorably impacted by the valuation allowance on the losses on Starry, which is further described below.

Quanta regularly evaluates valuation allowances established for deferred tax assets for which future realization is uncertain, including in connection with changes in tax laws. The estimation of required valuation allowances includes estimates of future taxable income. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Quanta considers projected future taxable income and tax planning strategies in making this assessment. If actual future taxable income differs from these estimates, Quanta may not realize deferred tax assets to the extent estimated. During the three and six months ended June 30, 2022, Quanta recognized $41.7 million and $50.0 million of unrealized losses on its investment in Starry and recorded a valuation allowance against such unrealized losses. During the three months ended March 31, 2023, Starry filed for bankruptcy under Chapter 11 of the U.S. Bankruptcy Code, as amended. Upon resolution of the bankruptcy proceedings, a portion of Quanta's unrealized losses may become deductible for income tax purposes.

As of June 30, 2023, the total amount of unrecognized tax benefits relating to uncertain tax positions was $46.3 million, a net increase of $4.7 million from December 31, 2022, which primarily resulted from a $4.7 million increase related to positions expected to be taken in 2023. Quanta's consolidated federal income tax returns for tax years 2017 through 2021 remain open to examination by the IRS, as the applicable statute of limitations periods have not yet expired. Additionally, various state and foreign tax returns filed by Quanta and certain subsidiaries for multiple periods remain under examination by various U.S. state and foreign tax authorities. Quanta does not consider any state in which it does business to be a major tax jurisdiction. Quanta believes it is reasonably possible that within the next 12 months unrecognized tax benefits may decrease by up to $11.9 million as a result of settlement of these examinations or as a result of the expiration of certain statute of limitations periods.

11. EQUITY:

Stock Repurchases

On May 23, 2023, Quanta's Board of Directors approved a new stock repurchase program that authorizes Quanta to purchase, from time to time through June 30, 2026, up to $500 million of its outstanding common stock. The new stock repurchase program became effective on July 1, 2023, upon expiration of Quanta's existing stock repurchase program.

Quanta repurchased the following shares of common stock in the open market under its stock repurchase program (in thousands):

Quarter ended:	Shares	Amount
June 30, 2023	—	$ —
March 31, 2023	—	—
December 31, 2022	87	$ 11,403
September 30, 2022	158	$ 21,033
June 30, 2022	731	$ 84,884
March 31, 2022	85	$ 10,426

Quanta's policy is to record a stock repurchase as of the trade date of the transaction; however, the payment of cash related to the repurchase is made on the settlement date of the transaction. During the three and six month ended June 30, 2023, Quanta did not make any cash payments related to stock repurchases. During the three and six months ended June 30, 2022, cash payments related to stock repurchases were $84.9 million and $94.4 million. Repurchases may be implemented through open market repurchases or privately negotiated transactions, at management's discretion, based on market and business conditions, applicable contractual and legal requirements, including restrictions under Quanta's senior credit facility, and other factors. Quanta is not obligated to acquire any specific amount of common stock, and the repurchase program may be modified or terminated by Quanta's Board of Directors at any time at its sole discretion and without notice.

Dividends

Quanta declared and paid the following cash dividends and cash dividend equivalents during 2022 and the first six months of 2023 (in thousands, except per share amounts):

Declaration Date	Record Date	Payment Date	Dividend Per Share	Dividends Declared
May 23, 2023	July 3, 2023	July 14, 2023	$ 0.08	$ 11,893
March 29, 2023	April 10, 2023	April 18, 2023	$ 0.08	$ 12,100
December 13, 2022	January 3, 2023	January 13, 2023	$ 0.08	$ 11,756
August 31, 2022	October 3, 2022	October 14, 2022	$ 0.07	$ 10,322
May 27, 2022	July 1, 2022	July 15, 2022	$ 0.07	$ 10,283
March 30, 2022	April 11, 2022	April 18, 2022	$ 0.07	$ 10,459

12. STOCK-BASED COMPENSATION:

Restricted Stock Units (RSUs) to be Settled in Common Stock

A summary of the activity for RSUs to be settled in common stock for the six months ended June 30, 2023 and 2022 is as follows (RSUs in thousands):

	2023		2022	
	RSUs	Weighted Average Grant Date Fair Value (Per Unit)	RSUs	Weighted Average Grant Date Fair Value (Per Unit)
Unvested at January 1	3,263	$78.74	3,880	$61.64
Granted	635	$158.93	801	$110.73
Vested	(1,159)	$67.23	(1,200)	$48.96
Forfeited	(101)	$111.48	(98)	$77.41
Unvested at June 30	2,638	$102.44	3,383	$77.47

The approximate fair value of RSUs that vested during the six months ended June 30, 2023 and 2022 was $182.8 million and $135.7 million.

During the six months ended June 30, 2023 and 2022, Quanta recognized $47.1 million and $40.5 million of non-cash stock compensation expense related to RSUs to be settled in common stock. As of June 30, 2023, there was $182.9 million of total unrecognized compensation expense related to unvested RSUs to be settled in common stock granted to both employees and non-employees. This cost is expected to be recognized over a weighted average period of 3.41 years.

Performance Stock Units (PSUs) to be Settled in Common Stock

A summary of the activity for PSUs to be settled in common stock for the six months ended June 30, 2023 and 2022 is as follows (PSUs in thousands):

	2023		2022	
	PSUs	Weighted Average Grant Date Fair Value (Per Unit)	PSUs	Weighted Average Grant Date Fair Value (Per Unit)
Unvested at January 1	733	$65.39	931	$47.27
Granted	177	$174.50	148	$119.04
Vested	(413)	$35.12	(334)	$40.15
Forfeited	(3)	$90.36	(17)	$58.79
Unvested at June 30	494	$129.66	728	$64.83

The Monte Carlo simulation valuation methodology applied the following key inputs:

	2023	2022
Valuation date price based on March 9, 2023 and March 2, 2022 closing stock prices of Quanta common stock	$160.55	$110.24
Historical volatility	35 %	39 %
Risk-free interest rate	4.62 %	1.64 %
Term in years	2.81	2.83

During the six months ended June 30, 2023 and 2022, Quanta recognized $15.0 million and $10.6 million of non-cash stock compensation expense related to PSUs to be settled in common stock. As of June 30, 2023, there was an estimated $43.4 million of total unrecognized compensation expense related to unearned and unvested PSUs. This amount is based on forecasted attainment of performance metrics and estimated forfeitures of unearned and unvested PSUs. The compensation expense related to outstanding PSUs can vary from period to period based on changes in forecasted achievement of established performance goals and the total number of shares of common stock that Quanta anticipates will be issued upon vesting of such PSUs. This cost is expected to be recognized over a weighted average period of 1.97 years.

During each of the six months ended June 30, 2023 and 2022, 0.7 million shares of common stock were earned and either issued or deferred for future issuance under Quanta's deferred compensation plans in connection with PSUs. The approximate fair values of PSUs earned during the six months ended June 30, 2023 and 2022 were $115.5 million and $72.4 million.

RSUs to be Settled in Cash

During the six months ended June 30, 2023 and 2022, compensation expense related to RSUs to be settled in cash was $8.6 million and $6.7 million. RSUs that are anticipated to be settled in cash are not included in the calculation of weighted average shares outstanding for earnings per share, and the estimated earned value of such RSUs is calculated at the end of each reporting period based on the market value of Quanta's common stock and is classified as a liability. Quanta paid $9.7 million and $8.7 million to settle liabilities related to cash-settled RSUs in the six months ended June 30, 2023 and 2022. Accrued liabilities for the estimated earned value of outstanding RSUs to be settled in cash were $10.3 million and $11.0 million as of June 30, 2023 and December 31, 2022.

13. EMPLOYEE BENEFIT PLANS:

Deferred Compensation Plans

Quanta maintains non-qualified deferred compensation plans under which eligible directors and key employees may defer their receipt of certain cash compensation and/or the settlement of certain stock-based awards. As of June 30, 2023 and December 31, 2022, the liability related to deferred cash compensation under these plans, including amounts contributed by Quanta, was $81.4 million and $67.4 million, the majority of which was included in "Insurance and other non-current liabilities" in the accompanying condensed consolidated balance sheets. Additionally, as of June 30, 2023 and December 31, 2022, the settlement and issuance of 207,512 and 252,026 shares of common stock underlying certain stock-based awards had been deferred under these plans, and such issuances are scheduled to occur in future periods.

To provide for future obligations related to deferred cash compensation under these plans, Quanta has invested in corporate-owned life insurance (COLI) policies covering certain participants in the deferred compensation plans, the underlying investments of which are intended to be aligned with the investment alternatives elected by plan participants. The COLI assets are recorded at their cash surrender value, which is considered their fair market value, and as of June 30, 2023 and December 31, 2022, the fair market values were $76.6 million and $64.0 million and were included in "Other assets, net" in the accompanying condensed consolidated balance sheets. The level of inputs for these fair value measurements is Level 2.

Changes in the fair market value of Quanta's COLI assets and deferred compensation liabilities largely offset and are recorded in the accompanying statements of operations as follows (in thousands):

		Three Months Ended June 30,		Six Months Ended June 30,	
Classification	**Change in fair market value of**	**2023**	**2022**	**2023**	**2022**
(Loss) gain included in Selling, general and administrative expenses	Deferred compensation liabilities	$ (4,103)	$ 10,110	$ (8,310)	$ 14,037
Other income (expense), net	COLI assets	$ 3,266	$ (10,164)	$ 6,412	$ (14,304)

14. COMMITMENTS AND CONTINGENCIES:

Legal Proceedings

Quanta is from time to time party to various lawsuits, claims and other legal proceedings that arise in the ordinary course of business. These actions typically seek, among other things, compensation for alleged personal injury, property damage, breach of contract, negligence or gross negligence, environmental liabilities, wage and hour and other employment-related damages, punitive damages, consequential damages, civil penalties or other losses, or injunctive or declaratory relief. With respect to all such lawsuits, claims and proceedings, Quanta records a reserve when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. In addition, Quanta discloses matters for which management believes a material loss is at least reasonably possible.

The assessment of whether a loss is probable or reasonably possible, and whether the loss or a range of loss is estimable, often involves a series of complex judgments about future events. In all instances, management has assessed the matter based on current information and made a judgment concerning its potential outcome, giving due consideration to the nature of the claim, the amount and nature of damages sought and the probability of success and taking into account, among other things, negotiations with claimants, discovery, settlements and payments, judicial rulings, arbitration and mediation decisions, advice of internal and external legal counsel, and other information and events pertaining to a particular matter. Costs incurred for litigation are expensed as incurred. Except as otherwise stated below, none of these proceedings are expected to have a material adverse effect on Quanta's consolidated financial position, results of operations or cash flows. However, management's judgment may prove materially inaccurate, and such judgment is made subject to the known uncertainties of litigation.

Peru Project Dispute

In 2015, Redes Andinas de Comunicaciones S.R.L. (Redes), a majority-owned subsidiary of Quanta, entered into two separate contracts with an agency of the Peruvian Ministry of Transportation and Communications (MTC), currently Programa Nacional de Telecomunicaciones (PRONATEL), as successor to Fondo de Inversion en Telecomunicaciones (FITEL), pursuant to which Redes would design, construct and operate certain telecommunication networks in rural regions of Peru. The aggregate consideration provided for in the contracts was approximately $248 million, consisting of approximately $151 million to be paid during the construction period and approximately $97 million to be paid during a 10-year post-construction operation and maintenance period. At the beginning of the project, FITEL made advance payments totaling approximately $87 million to Redes, which were secured by two on-demand advance payment bonds posted by Redes to guarantee proper use of the payments in the execution of the project. Redes also provided two on-demand performance bonds in the aggregate amount of $25 million to secure performance of its obligations under the contracts.

During the construction phase, the project experienced numerous challenges and delays, primarily related to issues which Quanta believes were outside of the control of and not attributable to Redes, including, among others, weather-related issues, local opposition to the project, permitting delays, the inability to acquire clear title to certain required parcels of land and other delays which Quanta believes were attributable to FITEL/PRONATEL. In response to various of these challenges and delays, Redes requested and received multiple extensions to certain contractual deadlines and relief from related liquidated damages.

However, in April 2019, PRONATEL provided notice to Redes claiming that Redes was in default under the contracts due to the delays and that PRONATEL would terminate the contracts if the alleged defaults were not cured. Redes responded by claiming that it was not in default, as the delays were due to events not attributable to Redes, and therefore PRONATEL was not entitled to terminate the contracts. PRONATEL subsequently terminated the contracts for alleged cause prior to completion of Redes' scope of work, exercised the on-demand performance bonds and advance payment bonds against Redes, and indicated its intention to claim damages, including liquidated damages under the contracts. As of the date of the contract terminations, Redes had incurred costs of approximately $157 million related to the design and construction of the project and had received approximately $100 million of payments (inclusive of the approximately $87 million advance payments).

In May 2019, Redes filed for arbitration before the Court of International Arbitration of the International Chamber of Commerce (ICC) against PRONATEL and the MTC. In the arbitration, Redes claimed that PRONATEL: breached and wrongfully terminated the contracts; wrongfully executed the advance payment bonds and the performance bonds; and was not entitled to the alleged amount of liquidated damages, and sought compensation for various damages arising from PRONATEL's actions in the initially claimed amount of approximately $ 190 million. In August 2022, Redes received the decision of the arbitration tribunal, which unanimously found in favor of Redes in connection with its claims and ordered, among other things, (i) repayment of the amounts collected by PRONATEL under the advance payment bonds and the performance bonds; (ii) payment of amounts owed for work completed by Redes under the contracts; (iii) payment of lost income in connection with Redes' future operation and maintenance of the networks; and (iv) payment of other related costs and damages to Redes as a result of the breach and improper termination of the contracts (including costs related to the execution of the bonds, costs related to the transfer of the networks and legal and expert fees). Accordingly, the arbitration tribunal awarded Redes approximately $177 million. In addition, per the terms of the arbitration decision, interest will accrue on the amount owed up to the date of payment.

The decision of the arbitration tribunal is final, with limited grounds on which PRONATEL and the MTC may seek to annul the decision in Peruvian courts. In December 2022, Redes filed an enforcement proceeding with respect to each project contract to secure recovery of the arbitration award, and PRONATEL and the MTC filed an annulment proceeding with respect to each project contract. The enforcement and annulment proceedings are pending within different commercial courts in Lima, Peru. In April 2023 and August 2023, Redes received favorable rulings in each of the annulment proceedings rejecting the grounds for annulment; however, PRONATEL and the MTC are pursuing, and are expected to continue to pursue, certain remaining legal challenges to such rulings. Decisions with respect to the enforcement proceedings are expected later in 2023. Additionally, in December 2022, following the favorable arbitration ruling, Quanta received $ 100.5 million pursuant to coverage under an insurance policy for the improper collection by PRONATEL and the MTC of the advance payment and performance bonds, and in January 2023 Quanta received $ 6.7 million pursuant to coverage under an insurance policy for nonpayment by PRONATEL and the MTC of amounts owed for work completed by Redes. Quanta is continuing to pursue collection of the ICC arbitration award and any amount collected would result in repayment of an equal amount to the insurers up to the amount received from the insurers.

Quanta also reserves the right to seek full compensation for the loss of its investment under applicable legal regimes, including investment treaties and customary international law, as well as to seek resolution through direct discussions with PRONATEL or the MTC. In connection with these rights, in May 2020 Quanta's Dutch subsidiary delivered to the Peruvian government an official notice of dispute arising from the termination of the contracts and related acts by PRONATEL (which are attributable to Peru) under the Agreement on the Encouragement and Reciprocal Protection of Investments between the Kingdom of the Netherlands and the Republic of Peru (Investment Treaty). The Investment Treaty protects Quanta's subsidiary's indirect ownership stake in Redes and the project, and provides for rights and remedies distinct from the ICC arbitration. In December 2020, Quanta's Dutch subsidiary filed a request for the institution of an arbitration proceeding against Peru with the International Centre for Settlement of Investment Disputes (ICSID) related to Peru's breach of the Investment Treaty, which was registered by ICSID in January 2021. In the ICSID arbitration, Quanta's Dutch subsidiary claims, without limitation, that Peru: (i) treated the subsidiary's investment in Redes and the project unfairly and inequitably; and (ii) effectively expropriated the subsidiary's investment in Redes and the project. In addition, Quanta's Dutch subsidiary is seeking full compensation for all damages arising from Peru's actions, including but not limited to (i) the fair market value of the investment and/or lost profits; (ii) attorneys' fees and arbitration costs; (iii) other related costs and damages and (iv) pre- and post-award interest. The ICSID arbitration hearing on the merits occurred in the second quarter of 2023 and a decision is currently expected in the first half of 2024.

Quanta believes Redes is entitled to all amounts awarded by the ICC arbitration tribunal, and that its Dutch subsidiary is entitled to other amounts associated with the pending ICSID arbitration proceeding. Quanta and Redes intend to vigorously pursue recovery of the amounts awarded by the ICC arbitration tribunal and take additional legal actions deemed necessary to enforce the ICC arbitration decision. However, due to the inherent uncertainty involved with, among other things, the annulment, enforcement and related proceedings, the ultimate timing and conclusion with respect to collection of the amount of the ICC arbitration award remains unknown.

As a result of the contract terminations and the inherent uncertainty involved in arbitration proceedings and recovery of amounts owed, during the three months ended June 30, 2019, Quanta recorded a charge to earnings of $79.2 million, which included a reduction of previously recognized earnings on the project, a reserve against a portion of the project costs incurred through the project termination date, an accrual for a portion of the alleged liquidated damages, and the estimated costs to complete the project turnover and close out the project. Quanta also initially recorded a contract receivable of approximately $120 million related to the project during the three months ended June 30, 2019, which includes the amounts collected by PRONATEL through exercise of the advance payment bonds and performance bonds. As of June 30, 2023, the total amount of the receivable was not changed and is included in “Other assets, net” in the accompanying condensed consolidated balance sheet. Additionally, with respect to the amounts received pursuant to coverage under the insurance policies described above, $ 107.2 million is included in “Insurance and other non-current liabilities” in the accompanying consolidated balance sheet as of June 30, 2023.

After considering, as discussed above, that the ultimate timing and conclusion with respect to collection of the full amount associated with the ICC arbitration award remains unknown, Quanta has not recognized a gain in the current period. To the extent amounts in excess of the current receivable are determined to be realizable, a gain would be recorded in the period such determination is made. However, if Quanta is ultimately not successful with respect to collection of the ICC arbitration award, through annulment or otherwise, or with respect to its claims in the pending ICSID arbitration proceeding, this matter could result in an additional significant loss that could have a material adverse effect on Quanta’s consolidated results of operations and cash flows.

Lorenzo Benton v. Telecom Network Specialists, Inc., et al.

In June 2006, plaintiff Lorenzo Benton filed a class action complaint in the Superior Court of California, County of Los Angeles, alleging various wage and hour violations against Telecom Network Specialists (TNS), a former subsidiary of Quanta. Quanta retained liability associated with this matter pursuant to the terms of Quanta’s sale of TNS in December 2012. Benton represents a class of workers that includes all persons who worked on certain TNS projects, including individuals that TNS retained through numerous staffing agencies. The plaintiff class in this matter is seeking damages for unpaid wages, penalties associated with the failure to provide meal and rest periods and overtime wages, interest and attorneys’ fees. In January 2017, the trial court granted a summary judgment motion filed by the plaintiff class and found that TNS was a joint employer of the class members and that it failed to provide adequate meal and rest breaks and failed to pay overtime wages. During 2019 and 2020, the parties filed additional summary judgment and other motions, and a bench trial on liability and damages was held. Liability and damages have been determined by the trial court, with the amount of liability for TNS, including interest through the date of the trial court’s orders, determined to be approximately $9.5 million. Separately, in 2022, the court issued a final ruling awarding attorneys’ fees and costs to plaintiffs in the amount of approximately $17.3 million. Quanta continues to contest its liability and the damages calculations asserted by the plaintiff class in this matter and believes the court’s decisions on these matters are not supported by controlling law and that attorneys’ fees would only be recoverable by the plaintiff class in the event Quanta’s appeal of the trial court’s rulings on liability and damages is unsuccessful.

Additionally, in November 2007, TNS filed cross complaints for indemnity and breach of contract against the staffing agencies, which employed many of the individuals in question. In December 2012, the trial court heard cross-motions for summary judgment filed by TNS and the staffing agencies pertaining to TNS’s demand for indemnity. The court denied TNS’s motion and granted the motions filed by the staffing agencies; however, the California Appellate Court reversed the trial court’s decision in part and instructed the trial court to reconsider its ruling. In February 2017, the court denied a new motion for summary judgment filed by the staffing companies and has since stated that the staffing companies would be liable to TNS for any damages owed to the class members that the staffing companies employed. However, Quanta currently believes that, due to solvency issues, any contribution from the staffing companies may not be substantial.

The final amount of liability and attorneys’ fees, if any, payable in connection with this matter remains the subject of pending litigation and will ultimately depend on various factors, including the outcome of the parties’ appeals of the trial court’s rulings on liability, damages, and attorneys’ fees and costs, and the solvency of the staffing agencies. Based on review and analysis of the trial court’s rulings on liability, Quanta does not believe, at this time, that it is probable this matter will result in a material loss. However, if Quanta is unsuccessful in this litigation and the staffing agencies are unable to fund damages owed to class members, based on rulings issued by the trial court, Quanta believes the range of reasonably possible loss to Quanta upon final resolution of this matter could be up to approximately $26.8 million, plus any additional attorneys’ fees, interest, and expenses awarded to the plaintiff class.

Hallen Acquisition Assumed Liability

In August 2019, in connection with the acquisition of The Hallen Construction Co., Inc. (Hallen), Quanta assumed certain contingent liabilities associated with a March 2014 natural gas-fed explosion and fire in the Manhattan borough of New York City, New York. The incident resulted in, among other things, loss of life, personal injury and the destruction of two buildings and other property damage. After investigation, the National Transportation Safety Board determined that the probable cause of the incident was the failure of certain natural gas infrastructure installed by Consolidated Edison, Inc. (Con Ed) and the failure of certain sewer infrastructure maintained by the City of New York. Pursuant to a contract with Con Ed, Hallen had performed certain work related to such natural gas infrastructure and agreed to indemnify Con Ed for certain claims, liabilities and costs associated with its work. Numerous lawsuits are pending in New York state courts related to the incident, which generally name Con Ed, the City of New York and Hallen as defendants. These lawsuits are at various stages and generally seek unspecified damages and, in some cases, punitive damages, for wrongful death, personal injury, property damage and business interruption.

Hallen's liabilities associated with this matter are expected to be covered under applicable insurance policies or contractual remedies negotiated by Quanta with the former owners of Hallen. When a loss becomes probable and estimable, Quanta expects to record an accrual of the estimated liability, offset by a receivable in the same amount related to such insurance coverage and contractual remedies. As of June 30, 2023, Quanta had not recorded an accrual related to this matter, as the ultimate amount of liability in connection with this matter remains subject to uncertainties associated with pending litigation, including, among other things, the likelihood and potential amount of damages that could be asserted or awarded. While Quanta believes the liabilities associated with this matter will not exceed the amount of available insurance coverage and contractual remedies, this matter could result in a loss that is in excess of, or not covered by, such remedies, which could have a material adverse effect on Quanta's consolidated financial condition, results of operations and cash flows.

Silverado Wildfire Matter

During 2022 and 2023, two of Quanta's subsidiaries received tenders of defense and demands for preservation of evidence from Southern California Edison Company (SCE) related to lawsuits filed from April 2021 through July 2023 against SCE and T-Mobile USA, Inc. (T-Mobile) in the Superior Court of California, County of Orange. The lawsuits generally assert property damage and related claims on behalf of certain individuals and subrogation claims on behalf of insurers relating to damages caused by a wildfire that began in October 2020 in Orange County, California (the Silverado Fire) and that is purported to have damaged approximately 13,000 acres. The lawsuits allege the Silverado Fire originated from utility poles in the area, generally claiming that each defendant failed to adequately maintain, inspect, repair or replace its overhead facilities, equipment and utility poles and remove vegetation in the vicinity; that the utility poles were overloaded with equipment from shared usage; and that SCE failed to de-energize its facilities during red flag warnings for a Santa Ana wind event. The lawsuits allege the Silverado Fire started when SCE and T-Mobile equipment contacted each other and note the Orange County Fire Department is investigating whether a T-Mobile lashing wire contacted an SCE overhead primary conductor in high winds. T-Mobile has filed cross-complaints against SCE alleging, among other things, that the ignition site of the Silverado Fire encompassed two utility poles replaced by SCE or a third party engaged by SCE, and that certain equipment, including T-Mobile's lashing wire, was not sufficiently re-secured after the utility pole replacements. One of Quanta's subsidiaries performed planning and other services related to the two utility poles, and another Quanta subsidiary replaced the utility poles and reattached the electrical and telecommunication equipment to the new utility poles in March 2019, approximately 19 months before the Silverado Fire. Pursuant to the general terms of a master services agreement and a master consulting services agreement between the Quanta subsidiaries and SCE, the subsidiaries agreed to defend and indemnify SCE against certain claims arising with respect to performance or nonperformance under the agreements. The SCE tender letters seek contractual indemnification and defense from Quanta's subsidiaries for the claims asserted against SCE in the lawsuits and the T-Mobile cross-complaints.

Quanta's subsidiaries intend to vigorously defend against the lawsuits, the T-Mobile cross-complaints and any other claims asserted in connection with the Silverado Fire. Quanta will continue to review additional information in connection with this matter as litigation and resolution efforts progress, and any such information may potentially allow Quanta to determine an estimate of potential loss, if any. As of June 30, 2023, Quanta had not recorded an accrual with respect to this matter, and Quanta is currently unable to reasonably estimate a range of reasonably possible loss, if any, because there are a number of unknown facts and legal considerations that may impact the amount of any potential liability. Quanta also believes that to the extent its subsidiaries are determined to be liable for any damages resulting from this matter, its insurance would be applied to any such liabilities over its deductible amount and its insurance coverage would be adequate to cover such potential liabilities. However, the ultimate amount of any potential liability and insurance coverage in connection with this matter remains subject to uncertainties associated with pending and potential future litigation.

Insurance

Quanta is insured for, among other things, employer's liability, workers' compensation, auto liability, aviation and general liability claims. Quanta manages and maintains a portion of its casualty risk indirectly through its wholly-owned captive insurance company, which insures all claims up to the amount of the applicable deductible of its third-party insurance programs, as well as with respect to certain other amounts.

As of June 30, 2023 and December 31, 2022, the gross amount accrued for employer's liability, workers' compensation, auto liability, general liability, and group health claims totaled $322.9 million and $319.6 million, of which $210.7 million and $209.8 million are included in "Insurance and other non-current liabilities," and the remainder is included in "Accounts payables and accrued expenses." Related insurance recoveries/receivables as of June 30, 2023 and December 31, 2022 were $5.3 million and $5.8 million, of which $0.3 million and $0.3 million are included in "Prepaid expenses and other current assets" and $5.0 million and $5.5 million are included in "Other assets, net."

Bonds and Parent Guarantees

As of June 30, 2023, the total amount of the outstanding performance bonds was estimated to be approximately $6.3 billion. Quanta's estimated maximum exposure related to the value of the performance bonds outstanding is lowered on each bonded project as the cost to complete is reduced, and each commitment under a performance bond generally extinguishes concurrently with the expiration of its related contractual obligation. The estimated cost to complete these bonded projects was approximately $2.4 billion as of June 30, 2023.

Capital Commitments and Other Committed Expenditures

As of June 30, 2023, Quanta had $59.9 million of production orders with expected delivery dates during the remainder of 2023 and $36.5 million of production orders with expected delivery dates in 2024 for capital commitments primarily related to the expansion of its equipment fleet. The majority of this amount relates to the expansion of Quanta's equipment fleet in order to accommodate manufacturer lead times on certain types of vehicles. Although Quanta has committed to purchase these vehicles at the time of their delivery, Quanta anticipates that the majority of these orders will be assigned to third party leasing companies and made available under certain master equipment lease agreements, thereby releasing Quanta from its capital commitments.

15. DETAIL OF CERTAIN ACCOUNTS:

Cash and Cash Equivalents

As of June 30, 2023 and December 31, 2022, cash equivalents were $197.1 million and $260.1 million and consisted primarily of money market investments and money market mutual funds. Quanta's cash equivalents are categorized as Level 1 assets, as all values are based on unadjusted quoted prices for identical assets in an active market. Cash and cash equivalents in foreign bank accounts are primarily held in Canada and Australia.

Cash and cash equivalents held by joint ventures, which are either consolidated or proportionately consolidated, are available to support joint venture operations, but Quanta cannot utilize those assets to support its other operations. Quanta generally has no right to cash and cash equivalents held by a joint venture other than participating in distributions, to the extent made, and in the event of dissolution. Cash and cash equivalents held by Quanta's wholly-owned captive insurance company are generally not available for use in support of its other operations. Amounts related to cash and cash equivalents held by consolidated or proportionately consolidated joint ventures and the captive insurance company, which are included in Quanta's total cash and cash equivalents balances, were as follows (in thousands):

	June 30, 2023	December 31, 2022
Cash and cash equivalents held by domestic joint ventures	$ 27,836	$ 14,291
Cash and cash equivalents held by foreign joint ventures	4,854	6,277
Total cash and cash equivalents held by joint ventures	32,690	20,568
Cash and cash equivalents held by captive insurance company	33,663	35,085
Cash and cash equivalents not held by joint ventures or captive insurance company	295,613	372,852
Total cash and cash equivalents	$ 361,966	$ 428,505

Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following (in thousands):

	June 30, 2023	December 31, 2022
Accounts payable, trade	$ 1,672,778	$ 1,302,086
Accrued compensation and related expenses	469,661	469,048
Other accrued expenses	374,469	381,995
Accounts payable and accrued expenses	$ 2,516,908	$ 2,153,129

Other accrued expenses primarily include accrued insurance liabilities, income and franchise taxes payable and deferred revenues.

Property and Equipment

Accumulated depreciation related to property and equipment was $1.74 billion and $1.65 billion as of June 30, 2023 and December 31, 2022. In addition, Quanta held property and equipment, net of $278.6 million and $298.0 million in foreign countries, primarily Canada, as of June 30, 2023 and December 31, 2022.

Other Intangible Assets

Accumulated amortization related to other intangible assets was $1.17 billion and $1.02 billion as of June 30, 2023 and December 31, 2022.

16. SUPPLEMENTAL CASH FLOW INFORMATION:

Reconciliations of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheets that sum to the total of such amounts shown in the statements of cash flows are as follows (in thousands):

	June 30,	
	2023	2022
Cash and cash equivalents	$ 361,966	$ 150,653
Restricted cash included in “Prepaid expenses and other current assets”[1]	5,205	1,763
Restricted cash included in “Other assets, net”[1]	1,141	950
Total cash, cash equivalents, and restricted cash reported in the statements of cash flows	$ 368,312	$ 153,366

	December 31,	
	2022	2021
Cash and cash equivalents	$ 428,505	$ 229,097
Restricted cash included in “Prepaid expenses and other current assets”[1]	3,759	1,836
Restricted cash included in “Other assets, net”[1]	950	954
Total cash, cash equivalents, and restricted cash reported in the statements of cash flows	$ 433,214	$ 231,887

(1) Restricted cash includes any cash that is legally restricted as to withdrawal or usage.

Supplemental cash flow information related to leases is as follows (in thousands):

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows used by operating leases	$ (47,470)	$ (49,268)
Operating cash flows used by finance leases	$ (507)	$ (54)
Financing cash flows used by finance leases	$ (992)	$ (727)
Lease assets obtained in exchange for lease liabilities:		
Operating leases	$ 52,494	$ 24,723
Finance leases	$ 25,373	$ 1,250
Lease financing transaction assets obtained in exchange for lease financing transaction liabilities	$ 7,136	$ 27,153

Additional supplemental cash flow information is as follows (in thousands):

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Cash (paid) received during the period for:		
Interest paid	$ (78,773)	$ (42,959)
Income taxes paid	$ (128,925)	$ (58,363)
Income tax refunds	$ 4,037	$ 5,470

Accrued capital expenditures were $31.2 million and $27.7 million as of June 30, 2023 and 2022. The impact of these items has been excluded from Quanta's capital expenditures in the accompanying condensed consolidated statements of cash flows due to their non-cash nature.

Item 2. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

General

The following discussion and analysis of the financial condition and results of operations of Quanta Services, Inc. (together with its subsidiaries, Quanta, we, us or our) should be read in conjunction with our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report and with our 2022 Annual Report, which was filed with the SEC on February 23, 2023 and is available on the SEC's website at www.sec.gov and on our website at www.quantaservices.com. The discussion below contains forward-looking statements that are based upon our current expectations and are subject to uncertainty and changes in circumstances. Actual results may differ materially from these expectations due to inaccurate assumptions and known or unknown risks and uncertainties, including those identified in *Cautionary Statement About Forward-Looking Statements and Information* above, in Item 1A. *Risk Factors* of Part II of this Quarterly Report and in Item 1A. *Risk Factors* of Part I of our 2022 Annual Report.

Overview

Our second quarter 2023 results reflect increased demand for our services, as revenue increased in all of our segments as compared to the second quarter of 2022.

With respect to our Electric Power Infrastructure Solutions (Electric Power) segment, utilities are continuing to invest significant capital in their electric power delivery systems through multi-year grid modernization and reliability programs, as well as system upgrades and hardening programs in response to recurring severe weather events. We have also experienced high demand for new and expanded transmission, substation and distribution infrastructure needed to reliably transport power.

With respect to our Renewable Energy Infrastructure Solutions (Renewable Energy) segment, the transition to a reduced-carbon economy is continuing to drive demand for renewable generation and related infrastructure (e.g., high-voltage electric transmission and substation infrastructure), as well as interconnection services necessary to connect and transmit renewable-generated electricity to existing electric power delivery systems. Our acquisition of Blattner Holding Company and its operating subsidiaries (collectively, Blattner) in the fourth quarter of 2021, has had a significant incremental impact on our ability to perform these services. Despite these positive longer-term trends, certain of our customers experienced supply chain challenges during 2022 and into the first half of 2023 that resulted in delays and shortages of, and increased costs for, materials necessary for certain projects, particularly sourcing restrictions related to solar panels necessary for the utility scale solar industry. Based on indications within this market during the second quarter of 2023, we expect the supply chain challenges and sourcing restrictions related to solar panels to improve throughout the remainder of the year.

With respect to our Underground Utility and Infrastructure Solutions (Underground and Infrastructure) segment, in 2022 and through the second quarter of 2023 we experienced strong demand for our services focused on utility spending, in particular our gas distribution services to natural gas utilities that are implementing modernization programs, and our downstream industrial services, as these customers continued to move forward with certain maintenance and capital spending that was deferred during the course of the COVID-19 pandemic. Additionally, during the first half of 2023 we generated increased revenues associated with large pipeline projects in Canada.

During the six months ended June 30, 2023, increased revenues resulted in $165.8 million of net cash provided by operating activities. Available commitments under our senior credit facility and cash and cash equivalents as of June 30, 2023 were $1.77 billion.

We expect the strong demand for our services will continue. Our remaining performance obligations and backlog were $12.48 billion and $27.20 billion as of June 30, 2023, representing increases of 41.8%, and 12.9% relative to December 31, 2022. For a reconciliation of backlog to remaining performance obligations, the most comparable financial measure prepared in conformity with generally accepted accounting principles in the United States (GAAP), see *Non-GAAP Financial Measures* below.

Significant Factors Impacting Results

Our revenues, profit, margins and other results of operations can be influenced by a variety of factors in any given period, including those described in Item 1 *Business* and Item 1A. *Risk Factors* of Part I of our 2022 Annual Report, and those factors have caused fluctuations in our results in the past and are expected to cause fluctuations in our results in the future. Additional information with respect to certain of those factors is provided below.

Seasonality. Typically, our revenues are lowest in the first quarter of the year because cold, snowy or wet conditions can create challenging working environments that are more costly for our customers or cause delays on projects. In addition, infrastructure projects often do not begin in a meaningful way until our customers finalize their capital budgets, which typically occurs during the first quarter. Second quarter revenues are typically higher than those in the first quarter, as some projects begin, but continued cold and wet weather can often impact productivity. Third quarter revenues are typically the highest of the year, as a greater number of projects are underway and operating conditions, including weather, are normally more accommodating. Generally, revenues during the fourth quarter are lower than the third quarter but higher than the second quarter, as many projects are completed and customers often seek to spend their capital budgets before year end. However, the holiday season and inclement weather can sometimes cause delays during the fourth quarter, reducing revenues and increasing costs. These seasonal impacts are typical for our U.S. operations, but seasonality for our international operations may differ. For example, revenues for certain projects in Canada are typically higher in the first quarter because projects are often accelerated in order to complete work while the ground is frozen and prior to the break up, or seasonal thaw, as productivity is adversely affected by wet ground conditions during warmer months.

Weather, natural disasters and emergencies. The results of our business in a given period can be impacted by adverse weather conditions, severe weather events, natural disasters or other emergencies, which include, among other things, heavy or prolonged snowfall or rainfall, hurricanes, tropical storms, tornadoes, floods, blizzards, extreme temperatures, wildfires, post-wildfire floods and debris flows, pandemics and earthquakes. Climate change has the potential to increase the frequency and extremity of severe weather events. These conditions and events can negatively impact our financial results due to, among other things, the termination, deferral or delay of projects, reduced productivity and exposure to significant liabilities due to failure of electrical power or other infrastructure on which we have performed services. However, severe weather events can also increase our emergency restoration services, which typically yield higher margins due in part to higher equipment utilization and absorption of fixed costs.

Demand for services. We perform the majority of our services under existing contracts, including MSAs and similar agreements pursuant to which our customers are not committed to specific volumes of our services. Therefore our volume of business can be positively or negatively affected by fluctuations in the amount of work our customers assign us in a given period, which may vary by geographic region. Examples of items that may cause demand for our services to fluctuate materially from quarter to quarter include: the financial condition of our customers, their capital spending and their access to capital; acceleration of any projects or programs by customers (e.g., modernization or hardening programs); economic and political conditions on a regional, national or global scale, including availability of renewable energy tax credits; interest rates; governmental regulations affecting the sourcing and costs of materials and equipment; other changes in U.S. and global trade relationships; and project deferrals and cancellations.

Revenue mix and impact on margins. The mix of revenues based on the types of services we provide in a given period will impact margins, as certain industries and services provide higher-margin opportunities. Our larger or more complex projects typically include, among others, transmission projects with higher voltage capacities; pipeline projects with larger-diameter throughput capacities; large-scale renewable generation projects; and projects with increased engineering, design or construction complexities, more difficult terrain or geographical requirements, or longer distance requirements. These projects typically yield opportunities for higher margins than our recurring services under MSAs described above, as we assume a greater degree of performance risk and there is greater utilization of our resources for longer construction timeframes. However, larger projects are subject to additional risk of regulatory delay and cyclicality. Project schedules also fluctuate, particularly in connection with larger, more complex or longer-term projects, which can affect the amount of work performed in a given period. Furthermore, smaller or less complex projects typically have a greater number of companies competing for them, and competitors at times may more aggressively pursue available work. A greater percentage of smaller scale or less complex work also could negatively impact margins due to the inefficiency of transitioning between a greater number of smaller projects versus continuous production on fewer larger projects. As a result, at times we may choose to maintain a portion of our workforce and equipment in an underutilized capacity to ensure we are strategically positioned to deliver on larger projects when they move forward.

Project variability and performance. Margins for a single project may fluctuate period to period due to changes in the volume or type of work performed, the pricing structure under the project contract or job productivity. Additionally, our productivity and performance on a project can vary period to period based on a number of factors, including unexpected project difficulties or site conditions (including in connection with difficult geographic characteristics); project location, including locations with challenging operating conditions; whether the work is on an open or encumbered right of way; inclement weather or severe weather events; environmental restrictions or regulatory delays; protests, other political activity or legal challenges related to a project; and the performance of third parties. Moreover, we currently generate a significant portion of our revenues under fixed price contracts, and fixed price contracts are more common in connection with our larger and more complex projects that typically involve greater performance risk. Under these contracts, we assume risks related to project estimates and execution, and project revenues can vary, sometimes substantially, from our original projections due to a variety of factors, including the additional complexity, timing uncertainty or extended bidding, regulatory and permitting processes associated with these projects. These variations can result in a reduction in expected profit, the incurrence of losses on a project or the issuance of change orders and/or assertion of contract claims against customers. See *Revenue Recognition - Contract Estimates and Changes in Estimates* in Note 3 of the Notes to Condensed Consolidated Financial Statements in Item 1.*Financial Statements* of Part I of this Quarterly Report.

Subcontract work and provision of materials. Work that is subcontracted to other service providers generally yields lower margins, and therefore an increase in subcontract work in a given period can decrease operating margins. In recent years, we have subcontracted approximately 20% of our work to other service providers. Our customers are usually responsible for supplying the materials for their projects. However, under some contracts we agree to procure all or part of the required materials. Margins may be lower on projects where we furnish a significant amount of materials, as our markup on materials is generally lower than our markup on labor costs, and in a given period an increase in the percentage of work with greater materials procurement requirements may decrease our overall margins, including in some cases our assuming price risk. Furthermore, fluctuations in the price or availability of materials, equipment and consumables that we or our customers utilize could impact costs to complete projects.

Results of Operations

Consolidated Results

Three months ended June 30, 2023 compared to the three months ended June 30, 2022

The following table sets forth selected statements of operations data, such data as a percentage of revenues for the periods indicated, as well as the dollar and percentage change from the prior period (dollars in thousands). The results of acquired businesses have been included in the following results of operations since their respective acquisition dates.

	Three Months Ended June 30,				Change	
	2023		2022		$	%
Revenues	$ 5,048,610	100.0 %	$ 4,232,003	100.0 %	$ 816,607	19.3 %
Cost of services	4,324,511	85.7	3,607,413	85.2	717,098	19.9 %
Gross profit	724,099	14.3	624,590	14.8	99,509	15.9 %
Equity in earnings of integral unconsolidated affiliates	9,370	0.2	18,565	0.4	(9,195)	(49.5)%
Selling, general and administrative expenses	(384,171)	(7.6)	(323,245)	(7.6)	(60,926)	18.8 %
Amortization of intangible assets	(70,025)	(1.4)	(107,945)	(2.6)	37,920	(35.1)%
Asset impairment charges	—	—	(2,800)	(0.1)	2,800	(100.0)%
Change in fair value of contingent consideration liabilities	—	—	(809)	—	809	(100.0)%
Operating income	279,273	5.5	208,356	4.9	70,917	34.0 %
Interest and other financing expenses	(48,189)	(1.0)	(28,639)	(0.7)	(19,550)	68.3 %
Interest income	1,448	—	222	—	1,226	552.3 %
Other income (expense), net	3,419	0.2	(42,527)	(1.0)	45,946	*
Income before income taxes	235,951	4.7	137,412	3.2	98,539	71.7 %
Provision for income taxes	69,367	1.4	41,252	0.9	28,115	68.2 %
Net income	166,584	3.3	96,160	2.3	70,424	73.2 %
Less: Net income attributable to non-controlling interests	685	—	8,140	(0.2)	(7,455)	(91.6)%
Net income attributable to common stock	$ 165,899	3.3 %	$ 88,020	2.1 %	$ 77,879	88.5 %

* The percentage change is not meaningful.

Revenues. Revenues increased due to a $465.1 million increase in revenues from our Renewable Energy segment, a $215.8 million increase in revenues from our Electric Power segment and a $135.7 million increase in revenues from our Underground and Infrastructure segment. See *Segment Results* below for additional information and discussion related to segment revenues.

Cost of services. Costs of services primarily includes wages, benefits, subcontractor costs, materials, equipment, and other direct and indirect costs, including related depreciation. The increase in cost of services generally correlates to the increase in revenues.

Equity in earnings of integral unconsolidated affiliates The decrease in equity in earnings was primarily driven by the timing of completion of projects associated with certain of our integral affiliates, as well as the reimbursement of certain large costs to LUMA by the owner of the transmission and distribution system during the three months ended June 30, 2022.

Selling, general and administrative expenses. The increase was partially attributable to an aggregate $28.7 million increase in the following items to support business growth: compensation expense, largely associated with increased salaries due primarily to headcount growth; and travel and related expenses. Also contributing to the increase was a $14.2 million increase in deferred compensation liabilities primarily driven by fair market value increases and an $11.9 million increase in legal and other consulting services. The fair market value changes in deferred compensation liabilities were largely offset by changes in the fair value of corporate-owned life insurance (COLI) assets associated with the deferred compensation plan, which are included in "Other (expense) income, net" as discussed below.

Amortization of intangible assets. The decrease was primarily related to a $40.7 million reduction of amortization of intangible assets associated with backlog for Blattner, which was fully amortized by the third quarter of 2022.

Operating income. Operating income was positively impacted by a $13.0 million decrease in corporate and non-allocated costs, which includes amortization expense, as well as a $11.9 million increase in operating income for our Electric Power segment, a $28.8 million increase in operating income for our Renewable Energy segment and a $17.3 million increase in operating income for our Underground and Infrastructure segment. Results for each of our business segments and corporate and non-allocated costs are discussed in the *Segment Results* section below.

Interest and other financing expenses. The increase primarily resulted from the impact of higher interest rates on our outstanding variable rate debt during the three months ended June 30, 2023 as compared to the three months ended June 30, 2022.

Other income (expense), net. The net other expense for the three months ended June 30, 2022 included a $41.7 million unrealized loss that resulted from the remeasurement of the fair value of our investment in Starry Group Holdings, Inc. (Starry). The increase in other income, net for three months ended June 30, 2023 compared to the three months ended June 30, 2022 also resulted from a $13.4 million favorable mark-to-market valuation of the COLI assets associated with our deferred compensation plans, partially offset by $9.1 million lower equity in earnings of non-integral affiliates.

Provision for income taxes. The effective tax rates for the three months ended June 30, 2023 and 2022 were 29.4% and 30.0%.

Comprehensive income. See Statements of Comprehensive Income in Item 1. *Financial Statements* of Part I of this Quarterly Report. Comprehensive income increased by $125.2 million in the three months ended June 30, 2023 as compared to the three months ended June 30, 2022, primarily due to a $70.4 million increase in net income and a $55.0 million increase in foreign currency translation gains. The predominant functional currencies for our operations outside the U.S. are Canadian and Australian dollars. The increase in foreign currency translation gains primarily resulted from strengthening of the Canadian dollar against the U.S. dollar for the three months ended June 30, 2023 as compared to the three months ended June 30, 2022.

EBITDA and adjusted EBITDA. See *Non-GAAP Financial Measures* below for a reconciliation of EBITDA and adjusted EBITDA to net income attributable to common stock, the most comparable GAAP financial measure. EBITDA increased 26.8%, or $92.1 million, to $436.3 million as compared to $344.2 million for the three months ended June 30, 2022, and adjusted EBITDA increased 11.8%, or $50.0 million, to $472.1 million as compared to $422.1 million for the three months ended June 30, 2022.

Six months ended June 30, 2023 compared to the six months ended June 30, 2022

The following table sets forth selected statements of operations data, such data as a percentage of revenues for the periods indicated, as well as the dollar and percentage change from the prior period (dollars in thousands):

	Six Months Ended June 30,				Change	
	2023		2022		$	%
Revenues	$ 9,477,436	100.0 %	$ 8,197,528	100.0 %	$ 1,279,908	15.6 %
Cost of services (including related depreciation)	8,180,142	86.3	7,024,767	85.7	1,155,375	16.4 %
Gross profit	1,297,294	13.7	1,172,761	14.3	124,533	10.6 %
Equity in earnings of integral unconsolidated affiliates	18,990	0.2	33,717	0.4	(14,727)	(43.7)%
Selling, general and administrative expenses	(768,723)	(8.1)	(648,132)	(7.9)	(120,591)	18.6 %
Amortization of intangible assets	(142,428)	(1.5)	(223,696)	(2.7)	81,268	(36.3)%
Asset impairment charges	—	—	(2,800)	—	2,800	(100.0)%
Change in fair value of contingent consideration liabilities	—	—	(5,978)	(0.1)	5,978	(100.0)%
Operating income	405,133	4.3	325,872	4.0	79,261	24.3 %
Interest and other financing expenses	(89,882)	(0.9)	(53,367)	(0.7)	(36,515)	68.4 %
Interest income	2,964	—	291	—	2,673	918.6 %
Other income (expense), net	11,285	0.1	(43,800)	(0.5)	55,085	*
Income before income taxes	329,500	3.5	228,996	2.8	100,504	43.9 %
Provision for income taxes	65,946	0.7	47,808	0.6	18,138	37.9 %
Net income	263,554	2.8	181,188	2.2	82,366	45.5 %
Less: Net income attributable to non-controlling interests	2,609	—	8,527	0.1	(5,918)	(69.4)%
Net income attributable to common stock	$ 260,945	2.8 %	$ 172,661	2.1 %	$ 88,284	51.1 %

* The percentage change is not meaningful.

Revenues. Revenues increased due to a $597.8 million increase in revenues from our Renewable Energy segment, a $413.2 million increase in revenues from our Electric Power segment and a $268.9 million increase in revenues from our Underground and Infrastructure segment. See *Segment Results* below for additional information and discussion related to segment revenues.

Cost of services. Costs of services primarily includes wages, benefits, subcontractor costs, materials, equipment, and other direct and indirect costs, including related depreciation. The increase in cost of services generally correlates to the increase in revenues.

Equity in earnings of integral unconsolidated affiliates The decrease in equity in earnings was primarily driven by the timing of completion of projects associated with certain of our integral affiliates, as well as the reimbursement of certain large costs to LUMA by the owner of the transmission and distribution system during the six months ended June 30, 2022.

Selling, general and administrative expenses. The increase was partially attributable to an aggregate $50.9 million increase in the following items to support business growth: compensation expense, largely associated with increased salaries due primarily to headcount growth; and travel and related expenses. Also contributing to the increase was a $22.3 million increase in expense related to deferred compensation liabilities. The fair market value changes in deferred compensation liabilities were largely offset by changes in the fair value of COLI assets associated with the deferred compensation plan, which are included in "Other (expense) income, net" as discussed below. Additional items contributing to the increase were an $11.5 million increase in legal and other consulting services; a $7.8 million increase in expenses associated with acquired businesses; a $5.6 million increase in depreciation expense primarily related to our new corporate headquarters and a $5.5 million increase in provision for credit allowance.

Amortization of intangible assets. The decrease was primarily due to a $88.8 million reduction of amortization of intangible assets associated with backlog for Blattner, which was fully amortized by the third quarter of 2022.

Operating income. Operating income was positively impacted by a $30.5 million decrease in corporate and non-allocated costs, which includes amortization expense, as well as a $30.7 million increase in operating income for our Underground and Infrastructure segment and a $23.6 million increase in operating income for our Electric Power segment. Partially offsetting the positive impact of these items was a $5.5 million decrease in operating income for our Renewable Energy segment. Results for each of our business segments and corporate and non-allocated costs are discussed in the *Segment Results* section below.

Interest and other financing expenses. The increase primarily resulted from the impact of higher interest rates on our outstanding variable rate debt during the six months ended June 30, 2023 as compared to the six months ended June 30, 2022.

Other income (expense), net. The net other expense for the six months ended June 30, 2022 was primarily due to an unrealized loss of $50.0 million that resulted from the remeasurement of the fair value of our investment in Starry. The increase in other income for the six months ended June 30, 2023 compared to the six months ended June 30, 2022 resulted from a $20.7 million favorable mark-to-market valuation of the COLI assets associated with our deferred compensation plan, partially offset by a $12.9 million decrease in equity in earnings of non-integral affiliates.

Provision for income taxes. The effective tax rates for the six months ended June 30, 2023 and 2022 were 20.0% and 20.9%. The tax rate for the six months ended June 30, 2023 was favorably impacted by the recognition of a $32.4 million benefit that resulted from equity incentive awards vesting at a higher fair market value than their grant date fair market value, as compared to the recognition of $21.2 million associated with this tax benefit for the six months ended June 30, 2022.

Comprehensive income. See Statements of Comprehensive Income in Item 1. *Financial Statements* of Part I of this Quarterly Report. Comprehensive income increased by $125.0 million in the six months ended June 30, 2023 as compared to the six months ended June 30, 2022, primarily due to a $82.4 million increase in net income and a $41.8 million increase in foreign currency translation gains. The predominant functional currencies for our operations outside the U.S. are Canadian and Australian dollars. The increase in foreign currency translation gains primarily resulted from strengthening of the Canadian dollar against the U.S. dollar for the six months ended June 30, 2023 as compared to the six months ended June 30, 2022.

EBITDA and adjusted EBITDA. See *Non-GAAP Financial Measures* below for a reconciliation of EBITDA and adjusted EBITDA to net income attributable to common stock, the most comparable GAAP financial measure. EBITDA increased 11.4%, or $73.8 million, to $723.8 million as compared to $650.0 million for the six months ended June 30, 2022, and adjusted EBITDA increased 5%, or $36.8 million, to $804.4 million as compared to $767.6 million for the six months ended June 30, 2022.

Segment Results

We report our results under three reportable segments: Electric Power, Renewable Energy and Underground and Infrastructure. Reportable segment information, including revenues and operating income by type of work, is gathered from each of our operating companies. Classification of our operating company revenues by type of work for segment reporting purposes can at times require judgment on the part of management. Our operating companies may perform joint projects for customers in multiple industries, deliver multiple types of services under a single customer contract or provide service offerings to various industries. For example, we perform joint trenching projects to install distribution lines for electric power and natural gas customers. Integrated operations and common administrative support for operating companies require that certain allocations be made to determine segment profitability, including allocations of corporate shared and indirect operating costs as well as general and administrative costs. Certain corporate costs are not allocated, including corporate facility costs; non-allocated corporate salaries, benefits and incentive compensation; acquisition and integration costs; non-cash stock-based compensation; amortization related to intangible assets; asset impairments related to goodwill and intangible assets; and change in fair value of contingent consideration liabilities.

Three months ended June 30, 2023 compared to the three months ended June 30, 2022

The following table sets forth segment revenues, segment operating income (loss) and operating margins for the periods indicated. Operating margin is calculated by dividing operating income (loss) by revenues. The following table also includes the dollar and percentage change from the prior period (dollars in thousands):

	Three Months Ended June 30,				Change	
	2023		2022		$	%
Revenues:						
Electric Power Infrastructure Solutions	$ 2,415,254	47.9 %	$ 2,199,430	52.0 %	$ 215,824	9.8 %
Renewable Energy Infrastructure Solutions	1,389,368	27.5	924,236	21.8	465,132	50.3 %
Underground Utility and Infrastructure Solutions	1,243,988	24.6	1,108,337	26.2	135,651	12.2 %
Consolidated revenues	$ 5,048,610	100.0 %	$ 4,232,003	100.0 %	$ 816,607	19.3 %
Operating income (loss):						
Electric Power Infrastructure Solutions	$ 244,017	10.1 %	$ 232,150	10.6 %	$ 11,867	5.1 %
Renewable Energy Infrastructure Solutions	110,487	8.0 %	81,687	8.8 %	28,800	35.3 %
Underground Utility and Infrastructure Solutions	107,207	8.6 %	89,943	8.1 %	17,264	19.2 %
Corporate and Non-Allocated Costs	(182,438)	(3.6)%	(195,424)	(4.6)%	12,986	(6.6)%
Consolidated operating income	$ 279,273	5.5 %	$ 208,356	4.9 %	$ 70,917	34.0 %

Electric Power Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the three months ended June 30, 2023 was primarily due to increased spending by our utility customers on grid modernization and hardening and approximately $80 million in revenues attributable to acquired businesses.

Operating Income. Operating income increased for the three months ended June 30, 2023 primarily due to the increase in revenues. Operating margin decreased during the three months ended June 30, 2023 partially due to $9.2 million of lower equity in earnings from our integral unconsolidated affiliates as discussed above, as well as lower than expected utilization of resources in Canada, which is expected to continue throughout the rest of the year. The negative impact of these items on operating margin was partially offset by improved operating margin associated with telecommunications projects.

Renewable Energy Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the three months ended June 30, 2023 was primarily due to increased demand and improved supply chain dynamics, as well as approximately $75 million in revenues attributable to acquired businesses.

Operating Income. The increase in operating income was primarily due to the increase in revenues during the three months ended June 30, 2023. The decrease in operating margin during the three months ended June 30, 2023 was primarily attributable to increased unabsorbed costs related to higher levels of fixed costs for resources required to support the expected increase in project activity in the second half of 2023 and into 2024. Additionally, operating margin during the three months ended June 30, 2022 benefited from the favorable acceleration of a transmission project by the customer.

Underground Utility and Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the three months ended June 30, 2023 was due to higher demand from our gas utility services customers, and to a lesser extent, increased revenues associated with large pipeline projects in Canada. These increases were partially offset by approximately $20 million as a result of unfavorable foreign currency exchange rates.

Operating Income. The increase in operating income and operating margin for the three months ended June 30, 2023 was primarily due to the increase in revenues, which contributed to higher levels of fixed cost absorption.

Corporate and Non-Allocated Costs

The decrease in corporate and non-allocated costs during the three months ended June 30, 2023 was primarily due to a $37.9 million decrease in intangible asset amortization, largely associated with the acquisition of Blattner, which was fully amortized by the third quarter of 2022; and an $11.9 million decrease in acquisition and integration costs related to recent acquisitions. These decreases were partially offset by an aggregate increase of $36.8 million primarily related to deferred compensation liabilities due to market fluctuations; compensation expense, primarily related to salaries due partially to growth in business; and consulting fees.

Six months ended June 30, 2023 compared to the six months ended June 30, 2022

The following table sets forth segment revenues, segment operating income (loss) and operating margins for the periods indicated, as well as the dollar and percentage change from the prior period (dollars in thousands):

	Six Months Ended June 30,				Change	
	2023		2022		$	%
Revenues:						
Electric Power Infrastructure Solutions	$ 4,751,291	50.1 %	$ 4,338,127	52.9 %	$ 413,164	9.5 %
Renewable Energy Infrastructure Solutions	2,397,668	25.3	1,799,868	22.0	597,800	33.2 %
Underground Utility and Infrastructure Solutions	2,328,477	24.6	2,059,533	25.1	268,944	13.1 %
Consolidated revenues	$ 9,477,436	100.0 %	$ 8,197,528	100.0 %	$ 1,279,908	15.6 %
Operating income (loss):						
Electric Power Infrastructure Solutions	459,166	9.7 %	435,569	10.0 %	23,597	5.4 %
Renewable Energy Infrastructure Solutions	146,143	6.1 %	151,629	8.4 %	(5,486)	(3.6)%
Underground Utility and Infrastructure Solutions	168,780	7.2 %	138,118	6.7 %	30,662	22.2 %
Corporate and Non-Allocated Costs	(368,956)	(3.9)%	(399,444)	(4.9)%	30,488	(7.6)%
Consolidated operating income	$ 405,133	4.3 %	$ 325,872	4.0 %	$ 79,261	24.3 %

Electric Power Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the six months ended June 30, 2023 was primarily due to increased spending by our utility customers on grid modernization and hardening and approximately $145 million in revenues attributable to acquired businesses.

Operating Income. Operating income increased for the six months ended June 30, 2023 primarily due to the increase in revenues. Operating margin decreased during the six months ended June 30, 2023 partially due to $14.7 million of lower equity in earnings from our integral unconsolidated affiliates as discussed above, as well as lower than expected utilization of resources in Canada, which is expected to continue throughout the rest of the year. The negative impact of these items on operating margin was partially offset by improved operating margin associated with telecommunications projects.

Renewable Energy Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the six months ended June 30, 2023 was primarily due to increased demand and improved supply chain dynamics, as well as approximately $110 million in revenues attributable to acquired businesses. These increases were partially offset by approximately $29 million as a result of unfavorable foreign currency exchange rates.

Operating Income. Operating income and operating margin during the six months ended June 30, 2023 were negatively impacted by normal variability in overall project timing and increased unabsorbed costs related to higher levels of fixed costs for resources required to support the expected increase in project activity in the second half of 2023 and into 2024. Additionally, the six months ended June 30, 2022 was negatively impacted by significant additional costs arising from delays on the large renewable transmission project in Canada that were due to the continued negative impact of the COVID-19 pandemic, which was exacerbated by the remote locations of the project.

Underground Utility and Infrastructure Solutions Segment Results

Revenues. The increase in revenues for the six months ended June 30, 2023 was primarily due to higher demand from our gas utility services customers, and to a lesser extent, due to increased revenues associated with large pipeline projects in Canada. These increases were partially offset by approximately $42 million as a result of unfavorable foreign currency exchange rates.

Operating Income. The increase in operating income and operating margin for the six months ended June 30, 2023 was primarily due to the increase in revenues, which contributed to higher levels of fixed cost absorption.

Corporate and Non-Allocated Costs

The decrease in corporate and non-allocated costs during the six months ended June 30, 2023 was primarily due to a $81.3 million decrease in intangible asset amortization, largely associated with the acquisition of Blattner, which was fully amortized by the third quarter of 2022; and a $7.2 million decrease in acquisition and integration costs. These decreases were partially offset by an aggregate increase of $58.0 million in costs primarily related to market fluctuations of deferred compensation liabilities; compensation expense, primarily related to non-cash stock compensation expense and salaries due partially to growth in business; travel and entertainment; and consulting fees.

Non-GAAP Financial Measures

EBITDA and Adjusted EBITDA

EBITDA and adjusted EBITDA, financial measures not recognized under GAAP, when used in connection with net income attributable to common stock, are intended to provide useful information to investors and analysts as they evaluate our performance. EBITDA is defined as earnings before interest and other financing expenses, taxes, depreciation and amortization, and adjusted EBITDA is defined as EBITDA adjusted for certain other items as described below. These measures should not be considered as an alternative to net income attributable to common stock or other financial measures of performance that are derived in accordance with GAAP. Management believes that the exclusion of these items from net income attributable to common stock enables us and our investors to more effectively evaluate our operations period over period and to identify operating trends that might not be apparent when including the excluded items.

As to certain of the items below, (i) non-cash stock-based compensation expense varies from period to period due to acquisition activity, changes in the estimated fair value of performance-based awards, forfeiture rates, accelerated vesting and amounts granted; (ii) acquisition and integration costs vary from period to period depending on the level of our acquisition activity; (iii) equity in (earnings) losses of non-integral unconsolidated affiliates varies from period to period depending on the activity and financial performance of such affiliates, the operations of which are not operationally integral to us; (iv) unrealized mark-to-market adjustments on investments vary from period to period based on fluctuations in the market price of such company's common stock; (v) gains and losses on the sale of investments vary from period to period depending on activity; (vi) asset impairment charges vary from period to period depending on economic and other factors; and (vii) change in fair value of contingent consideration liabilities varies from period to period depending on the performance in post-acquisition periods of certain acquired businesses, and the effect of present value accretion on fair value calculations. Because EBITDA and adjusted EBITDA, as defined, exclude some, but not all, items that affect net income attributable to common stock, such measures may not be comparable to similarly titled measures of other companies. The most comparable GAAP financial measure, net income attributable to common stock, and information reconciling the GAAP and non-GAAP financial measures, are included below. The following table shows dollars in thousands:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net income attributable to common stock (GAAP as reported)	$ 165,899	$ 88,020	$ 260,945	$ 172,661
Interest and other financing expenses	48,189	28,639	89,882	53,367
Interest income	(1,448)	(222)	(2,964)	(291)
Provision for income taxes	69,367	41,252	65,946	47,808
Depreciation expense	79,876	73,959	158,258	144,913
Amortization of intangible assets	70,025	107,945	142,428	223,696
Interest, income taxes, depreciation and amortization included in equity in earnings of integral unconsolidated affiliates	4,412	4,579	9,282	7,840
EBITDA	436,320	344,172	723,777	649,994
Non-cash stock-based compensation	34,607	28,090	62,058	51,082
Acquisition and integration costs [(1)]	2,284	14,191	22,172	29,322
Equity in losses (earnings) of non-integral unconsolidated affiliates	(468)	(9,611)	(2,085)	(14,949)
Unrealized loss from mark-to-market adjustment on investment[(2)]	—	41,654	—	50,047
Gains on sales of investments[(3)]	(674)	—	(1,496)	(6,696)
Asset impairment charges	—	2,800	—	2,800
Change in fair value of contingent consideration liabilities	—	809	—	5,978
Adjusted EBITDA	$ 472,069	$ 422,105	$ 804,426	$ 767,578

(1) The amounts for the three and six months ended June 30, 2022 include $11.5 million and $23.0 million of expenses that are associated with change of control payments as a result of the acquisition of Blattner.

(2) The amounts for the three and six months ended June 30, 2022 are unrealized losses from decreases in fair value of our investment in Starry.

(3) The amount for the six months ended June 30, 2022 is a gain as a result of the sale of a non-marketable equity security interest equity in a technology company.

Remaining Performance Obligations and Backlog

A performance obligation is a promise in a contract with a customer to transfer a distinct good or service. Our remaining performance obligations represent management's estimate of consolidated revenues that are expected to be realized from the remaining portion of firm orders under fixed price contracts not yet completed or for which work has not yet begun, which includes estimated revenues attributable to consolidated joint ventures and variable interest entities, revenues from funded and unfunded portions of government contracts to the extent they are reasonably expected to be realized, and revenues from change orders and claims to the extent management believes they will be earned and are probable of collection.

We have also historically disclosed our backlog, a measure commonly used in our industry but not recognized under GAAP. We believe this measure enables management to more effectively forecast our future capital needs and results and better identify future operating trends that may not otherwise be apparent. We believe this measure is also useful for investors in forecasting our future results and comparing us to our competitors. Our remaining performance obligations are a component of backlog, which also includes estimated orders under MSAs, including estimated renewals, and non-fixed price contracts expected to be completed within one year. Our methodology for determining backlog may not be comparable to the methodologies used by other companies.

As of June 30, 2023 and December 31, 2022, MSAs accounted for 46% and 52% of our estimated 12-month backlog and 57% and 65% of our total backlog. Generally, our customers are not contractually committed to specific volumes of services under our MSAs, and most of our contracts can be terminated on short notice even if we are not in default. We determine the estimated backlog for these MSAs using recurring historical trends, factoring in seasonal demand and projected customer needs based upon ongoing communications. In addition, many of our MSAs are subject to renewal, and these potential renewals are considered in determining estimated backlog. As a result, estimates for remaining performance obligations and backlog are subject to change based on, among other things, project accelerations; project cancellations or delays, including but not limited to those caused by commercial issues, regulatory requirements, natural disasters, emergencies and adverse weather conditions; and final acceptance of change orders by customers. These factors can cause revenues to be realized in periods and at levels that are different than originally projected.

The following table reconciles total remaining performance obligations to our backlog (a non-GAAP financial measure) by reportable segment along with estimates of amounts expected to be realized within 12 months (in thousands):

	June 30, 2023		December 31, 2022	
	12 Month	Total	12 Month	Total
Electric Power Infrastructure Solutions				
Remaining performance obligations	$ 2,584,140	$ 4,128,988	$ 2,124,820	$ 3,033,472
Estimated orders under MSAs and short-term, non-fixed price contracts	4,948,080	9,454,858	5,415,427	10,049,435
Backlog	$ 7,532,220	$ 13,583,846	$ 7,540,247	$ 13,082,907
Renewable Energy Infrastructure Solutions				
Remaining performance obligations	$ 5,048,636	$ 6,801,436	$ 3,183,568	$ 4,638,115
Estimated orders under MSAs and short-term, non-fixed price contracts	118,333	206,102	57,555	84,094
Backlog	$ 5,166,969	$ 7,007,538	$ 3,241,123	$ 4,722,209
Underground Utility and Infrastructure Solutions				
Remaining performance obligations	$ 1,184,061	$ 1,546,395	$ 1,038,543	$ 1,129,837
Estimated orders under MSAs and short-term, non-fixed price contracts	1,755,797	5,057,435	1,973,982	5,158,814
Backlog	$ 2,939,858	$ 6,603,830	$ 3,012,525	$ 6,288,651
Total				
Remaining performance obligations	$ 8,816,837	$ 12,476,819	$ 6,346,931	$ 8,801,424
Estimated orders under MSAs and short-term, non-fixed price contracts	6,822,210	14,718,395	7,446,964	15,292,343
Backlog	$ 15,639,047	$ 27,195,214	$ 13,793,895	$ 24,093,767

The increases in remaining performance obligations and backlog from December 31, 2022 to June 30, 2023 were primarily attributable to multiple new project awards.

Liquidity and Capital Resources

Overview

We plan to fund our working capital, capital expenditures, debt service, dividends and other cash requirements with our current available liquidity and cash from operations, which could be affected by general economic, financial, competitive, legislative, regulatory, business and other factors, many of which are beyond our control. Management monitors financial markets and national and global economic conditions for factors that may affect our liquidity and capital resources.

Our capital deployment priorities that require the use of cash include: (i) working capital to fund ongoing operating needs, (ii) capital expenditures to meet anticipated demand for our services, (iii) acquisitions and investments to facilitate the long-term growth and sustainability of our business, and (iv) return of capital to stockholders, including through the payment of dividends and repurchases of our outstanding common stock. We intend to fund these requirements primarily with cash flow from operating activities, as well as debt financing as needed.

Cash Requirements and Capital Allocation

During the six months ended June 30, 2023, there were no material changes outside the ordinary course of business in the specified contractual obligations or changes to our capital allocation priorities as set forth in Item 7. *Management's Discussion and Analysis of Financial Condition* and *Results of Operations* in Part II of the 2022 Annual Report. We anticipate that our future cash flows from operating activities, cash and cash equivalents on hand, existing borrowing capacity under our senior credit facility and commercial paper program and ability to access capital markets for additional capital will provide sufficient funds to enable us to meet our cash requirements for the next twelve months and over the longer term.

Significant Sources of Cash

Cash flow from operating activities is primarily influenced by demand for our services and operating margins but is also influenced by the timing of working capital needs associated with the various types of services that we provide. Our working capital needs may increase when we commence large volumes of work under circumstances where project costs are required to be paid before the associated receivables are billed and collected. Additionally, operating cash flows may be negatively impacted as a result of unpaid and delayed change orders and claims. Changes in project timing due to delays or accelerations and other economic, regulatory, market and political factors that may affect customer spending could also impact cash flow from operating activities. Further information with respect to our cash flow from operating activities is set forth below and in Note 16 of the Notes to Condensed Consolidated Financial Statements in Item 1. *Financial Statements* of Part I of this Quarterly Report.

Our available commitments under our senior credit facility and cash and cash equivalents as of June 30, 2023 were as follows (in thousands):

		June 30, 2023
Total capacity available for revolving loans, credit support for commercial paper program and letters of credit	$	2,640,000
Less:		
Borrowings of revolving loans		217,440
Commercial paper program notes outstanding[(1)]		699,200
Letters of credit outstanding		312,700
Available commitments for revolving loans, credit support for commercial paper program and letters of credit		1,410,660
Plus:		
Cash and cash equivalents [(2)]		361,966
Total available commitments under senior credit facility and cash and cash equivalents	$	1,772,626

(1) Represents unsecured notes issued under our commercial paper program, which allows for the issuance of notes up to a maximum aggregate face amount of $1.0 billion outstanding at any time. Available commitments for revolving loans under our senior credit facility must be maintained to provide credit support for notes issued under our commercial paper program, and therefore such notes effectively reduce the available borrowing capacity under our senior credit facility.

(2) Further information with respect to our cash and cash equivalents is set forth below and in Note 15 of the Notes to Condensed Consolidated Financial Statements in Item 1*Financial Statements* of Part I of this Quarterly Report. This amount includes $93.5 million in jurisdictions outside of the U.S., principally in Canada and Australia. There are currently no legal or economic restrictions that would materially impede our ability to repatriate cash.

We consider our investment policies related to cash and cash equivalents to be conservative, as we maintain a diverse portfolio of what we believe to be high-quality cash and cash equivalent investments with short-term maturities. Additionally, subject to the conditions specified in the credit agreement for our senior credit facility, we have the option to increase the capacity of our senior credit facility, in the form of an increase in the revolving commitments, term loans or a combination thereof, from time to time, upon receipt of additional commitments from new or existing lenders by up to an additional (i) $400.0 million plus (ii) additional amounts so long as the Incremental Leverage Ratio Requirement (as defined in the credit agreement) is satisfied at the time of such increase. The Incremental Leverage Ratio Requirement requires, among other things, after giving pro forma effect to such increase and the use of proceeds therefrom, compliance with the credit agreement's financial covenants as of the most recent fiscal quarter end for which financial statements were required to be delivered. Further information with respect to our debt obligations is set forth in Note 8 of the Notes to Condensed Consolidated Financial Statements in Item 1. Financial Statements of Part I of this Quarterly Report.

We may also seek to access the capital markets from time to time to raise additional capital, increase liquidity as necessary, refinance or extend the term of our existing indebtedness, fund acquisitions or otherwise fund our capital needs. While our financial strategy and consistent performance have allowed us to maintain investment grade ratings, our ability to access capital markets in the future depends on a number of factors, including our financial performance and financial position, our credit ratings, industry conditions, general economic conditions, our backlog, capital expenditure commitments, market conditions and market perceptions of us and our industry.

Sources and Uses of Cash, Cash Equivalents and Restricted Cash During the Six Months Ended June 30, 2023 and 2022

In summary, our cash flows for each period were as follows (in thousands):

	Six Months Ended June 30,	
	2023	2022
Net cash provided by operating activities	$ 165,822	$ 203,821
Net cash used in investing activities	$ (567,367)	$ (211,018)
Net cash provided by (used in) financing activities	$ 336,294	$ (70,916)

Operating Activities

Net cash provided by operating activities of $165.8 million and $203.8 million in the six months ended June 30, 2023 and 2022 primarily reflected earnings adjusted for non-cash items and cash used by the main components of working capital: “Accounts and notes receivable,” “Contract assets,” “Prepaid expenses and other current assets,” “Accounts payable and accrued expenses,” and “Contract liabilities.” The net cash provided by operating activities during the six months ended June 30, 2023 and 2022 was negatively impacted by incremental working capital requirements related to the large renewable transmission project in Canada and the timing of the associated billings.

As discussed above, cash flow provided by operating activities is primarily influenced by demand for our services and operating margins but is also influenced by working capital needs. Our working capital needs may increase when we commence large volumes of work under circumstances where project costs, primarily labor, equipment and subcontractors, are required to be paid before the associated receivables are billed and collected and when we incur costs for work that is the subject of unpaid change orders and claims. Accordingly, changes within working capital in accounts receivable, contract assets and contract liabilities are normally related and are typically affected on a collective basis by changes in revenue due to the timing and volume of work performed and variability in the timing of customer billings and payments, as well as change orders and claims. Additionally, working capital needs are generally higher during the summer and fall due to increased demand for our services when favorable weather conditions exist in many of our operating regions. Conversely, working capital assets are typically converted to cash during the winter. These seasonal trends can be offset by changes in project timing due to delays or accelerations and other economic factors that may affect customer spending, including market conditions or the impact of certain unforeseen events (e.g., regulatory and other actions that impact the supply chain for certain materials).

Days sales outstanding (DSO) represents the average number of days it takes revenues to be converted into cash, which management believes is an important metric for assessing liquidity. A decrease in DSO has a favorable impact on cash flow from operating activities, while an increase in DSO has a negative impact on cash flow from operating activities. DSO is calculated by using the sum of current accounts receivable, net of allowance (which includes retainage and unbilled balances), plus contract assets, less contract liabilities, and divided by average revenues per day during the quarter. DSO as of June 30, 2023 was 78 days, which was lower than DSO of 81 days as of June 30, 2022 and lower than our five-year historical average DSO of 82 days. This decrease in DSO as compared to June 30, 2022 was partially due to an increase in contract liabilities related to favorable billing terms on certain large projects, as well as increased revenues. The favorable impact on operating cash flow related to the decrease in DSO was partially offset by our prepayment of amounts to suppliers for certain project materials that require a long lead time and increased working capital requirements primarily related to increased unapproved change orders included in contract assets from the aforementioned large renewable transmission project in Canada.

Investing Activities

Net cash used in investing activities in the six months ended June 30, 2023 included $452.3 million related to acquisitions and $185.6 million of capital expenditures. Partially offsetting these items were $42.3 million of proceeds from the sale of non-integral equity investments and $35.0 million of proceeds from the sale of, and insurance settlements related to, property and equipment.

Net cash used in investing activities in the six months ended June 30, 2022 included $231.5 million of capital expenditures and $16.7 million of cash used for investments, partially offset by $25.4 million of proceeds from the sale of, and insurance settlements related to, property and equipment and $16.9 million of cash received from investments, which primarily related to proceeds received from the sale of a non-controlling ownership interest in a technology company.

Our industry is capital intensive, and we expect substantial capital expenditures and commitments for equipment purchases and equipment lease and rental arrangements to be needed for the foreseeable future in order to meet anticipated demand for our services. In addition, we expect to continue to pursue strategic acquisitions and investments, although we cannot predict the timing or amount of the cash needed for these initiatives.

Financing Activities

Net cash provided by financing activities in the six months ended June 30, 2023 included $491.7 million of net borrowings under our senior credit facility and commercial paper program, partially offset by $110.8 million of cash payments to satisfy tax withholding obligations associated with stock-based compensation and $24.5 million of cash payments for dividends.

Net cash used in financing activities in the six months ended June 30, 2022 included $94.4 million of cash payments for common stock repurchases, $76.2 million of cash payments to satisfy tax withholding obligations associated with stock-based compensation and $20.9 million of cash payments for dividends. These items were partially offset by $142.1 million of net borrowings under our senior credit facility.

We expect to continue to utilize cash for similar financing activities in the future, including repayments under our senior credit facility and commercial paper program, payment of cash dividends and repurchases of our common stock and/or debt securities.

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with GAAP. Certain information and footnote disclosures, normally included in annual financial statements prepared in accordance with GAAP, have been condensed or omitted pursuant to those rules and regulations. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities known to exist as of the date the condensed consolidated financial statements are published and the reported amounts of revenues and expenses recognized during the periods presented. We review all significant estimates affecting our condensed consolidated financial statements on a recurring basis and record the effect of any necessary adjustments prior to their publication. Judgments and estimates are based on our beliefs and assumptions derived from information available at the time such judgments and estimates are made. Uncertainties with respect to such estimates and assumptions are inherent in the preparation of financial statements. There can be no assurance that actual results will not differ from those estimates. Management has reviewed its development and selection of critical accounting estimates with the audit committee of our Board of Directors. Our accounting policies are primarily described in Note 2 of the Notes to Consolidated Financial Statements in Item 8. *Financial Statements and Supplementary Data* in Part II of the 2022 Annual Report and should be read in conjunction with the accounting policies identified that we believe affect our more significant judgments and estimates detailed in Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* of Part II of our 2022 Annual Report.

Item 3. *Quantitative and Qualitative Disclosures about Market Risk.*

There were no material changes to our quantitative and qualitative disclosures about market risk during the six months ended June 30, 2023. Our primary exposure to market risk relates to unfavorable changes in interest rates and currency exchange rates. Refer to the information on financial market risk related to changes in interest rates and foreign currency exchange rates in Item 7A. *Quantitative and Qualitative Disclosures About Market Risk* of Part II of our 2022 Annual Report.

Item 4. *Controls and Procedures.*

Attached as exhibits to this Quarterly Report on Form 10-Q are certifications of Quanta's Chief Executive Officer and Chief Financial Officer that are required in accordance with Rule 13a-14 of the Securities Exchange Act of 1934, as amended (the Exchange Act). This Item 4. section includes information concerning the controls and controls evaluation referred to in the certifications, and it should be read in conjunction with the certifications for a more complete understanding of the topics presented.

Evaluation of Disclosure Controls and Procedures

Our management has established and maintains a system of disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act, such as this Quarterly Report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms. The disclosure controls and procedures are also designed to provide reasonable assurance that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

As of the end of the period covered by this Quarterly Report, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(b), as such disclosure controls and procedures are defined in Rule 13a-15(e) and 15d-15(e) of the Exchange Act. This evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer. Based on this evaluation, these officers have concluded that, as of June 30, 2023, our disclosure controls and procedures were effective to provide reasonable assurance of achieving their objectives.

Evaluation of Internal Control over Financial Reporting

We acquired three business during the six months ended June 30, 2023. We are in the process of integrating these acquired business into our overall internal control over financial reporting process.

Except as noted above, there has been no change in our internal control over financial reporting that occurred during the quarter ended June 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Design and Operation of Control Systems

Our management, including the Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and breakdowns can occur because of simple errors or mistakes. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

PART II — OTHER INFORMATION

Item 1. *Legal Proceedings.*

We are from time to time party to various lawsuits, claims and other legal proceedings that arise in the ordinary course of business. These actions typically seek, among other things, compensation for alleged personal injury, breach of contract, negligence or gross negligence and/or property damage, environmental liabilities, wage and hour claims and other employment-related damages, punitive damages, consequential damages, civil penalties or other losses, or injunctive or declaratory relief, as well as interest and attorneys' fees associated with such claims. With respect to all such lawsuits, claims and proceedings, we record a reserve when we believe it is probable that a loss has been incurred and the amount of loss can be reasonably estimated. In addition, we disclose matters for which management believes a material loss is at least reasonably possible. See Note 14 of the Notes to Condensed Consolidated Financial Statements in Item 1. *Financial Statements* of Part I of this Quarterly Report, which is incorporated by reference in this Item 1, for additional information regarding litigation, claims and other legal proceedings.

Item 1A. *Risk Factors.*

Our business is subject to a variety of risks and uncertainties that are difficult to predict and many of which are outside of our control. For a detailed discussion of the risks that affect our business, refer to Item 1A. *Risk Factors* of Part I of our 2022 Annual Report. As of the date of this filing, there have been no material changes to the risk factors previously described in our 2022 Annual Report. The matters specifically identified are not the only risks and uncertainties facing our company, and risks and uncertainties not known to us or not specifically identified also may impair our business operations. If any of these risks and uncertainties occur, our business, financial condition, results of operations and cash flows could be negatively affected, which could negatively impact the value of an investment in our company.

Item 2. ***Unregistered Sales of Equity Securities and Use of Proceeds.***

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities During the Second Quarter of 2023

The following table contains information about our purchases of equity securities during the three months ended June 30, 2023.

Period	Total Number of Shares Purchased (1)(2)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number (or Approximate Dollar Value) of Shares that may yet be Purchased Under the Plans or Programs (1)
April 1 - 30, 2023				
Open Market Stock Repurchases (1)	—	$ —	—	$ 345,073,142
Tax Withholding Obligations (2)	9,050	$ 162.01	—	
May 1 - 31, 2023				
Open Market Stock Repurchases (1)	—	$ —	—	$ 345,073,142
Tax Withholding Obligations (2)	2,189	$ 171.36	—	
June 1 - 30, 2023				
Open Market Stock Repurchases (1)	—	$ —	—	$ 345,073,142
Tax Withholding Obligations (2)	1,230	$ 190.51	—	
Total	12,469		—	

(1) On May 24, 2023, we issued a press release announcing that our Board of Directors approved a stock repurchase program that authorizes us to purchase, from time to time through June 30, 2026, up to $500 million of our outstanding common stock (the 2023 Program). The 2023 Program became effective on July 1, 2023, upon expiration of our stock repurchase program that was announced on August 6, 2020 that authorized us to purchase, from time to time through June 30, 2023, up to $500 million of our outstanding common stock (the 2020 Program). Through June 30, 2023, we had acquired approximately 1.4 million shares of our outstanding common stock in the open market for a total cost of approximately $154.9 million under the 2020 Program. Repurchases under the 2023 Program can be made in open market and privately negotiated transactions, at our discretion, based on market and business conditions, applicable contractual and legal requirements and other factors. The 2023 Program does not obligate us to acquire any specific amount of common stock and may be modified or terminated by our Board of Directors at any time at its sole discretion and without notice.

(2) Includes shares purchased from employees to satisfy tax withholding obligations in connection with the vesting of restricted stock unit and performance stock unit awards or the settlement of previously vested but deferred restricted stock unit and performance stock unit awards.

Item 3. ***Defaults Upon Senior Securities.***

None.

Item 4. ***Mine Safety Disclosures.***

Not applicable.

Item 5. ***Other Information.***

Insider Trading Arrangements

On May 15, 2023, Donald C. Wayne, Executive Vice President and General Counsel of Quanta, adopted a Rule 10b5-1 trading arrangement (as such term is defined in Item 408 of Regulation S-K). Mr. Wayne's plan provides for the potential sale of up to 17,750 shares of Quanta's common stock through April 30, 2024.

This Rule 10b5-1 trading arrangement is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Securities Exchange Act of 1934, as amended, and Quanta’s policies regarding transactions in our securities.

Item 6. *Exhibits.*

Exhibit No.		Description
3.1		Restated Certificate of Incorporation of Quanta Services, Inc. (previously filed as Exhibit 3.1 to Quanta's Form 8-K filed March 26, 2019 and incorporated herein by reference)
3.2		Bylaws of Quanta Services, Inc., as amended and restated January 13, 2023 (previously filed as Exhibit 3.1 to Quanta’s Form 8-K filed January 19, 2023 and incorporated herein by reference)
31.1	*	Certification by Chief Executive Officer pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	*	Certification by Chief Financial Officer pursuant to Rule 13a -14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	*	Certification by Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
101	*	The following financial statements from Quanta’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations, (iii) Condensed Consolidated Statements of Comprehensive Income, (iv) Condensed Consolidated Statements of Cash Flows, (v) Condensed Consolidated Statements of Equity and (vi) Notes to Condensed Consolidated Financial Statements, tagged as blocks of text and with detailed tags
104	*	The cover page from Quanta’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, formatted in Inline XBRL (included as Exhibit 101)

* Filed or furnished herewith

^ Management contracts or compensatory plans or arrangements

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant, Quanta Services, Inc., has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

QUANTA SERVICES, INC.

By: /s/ PAUL M. NOBEL

Paul M. Nobel
Senior Vice President and Chief Accounting Officer
(Principal Accounting Officer)

Dated: August 3, 2023

Exhibit 31.1

I, Earl C. Austin, Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quanta Services, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2023

By: /s/ EARL C. AUSTIN, JR.

Earl C. Austin, Jr.
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

I, Jayshree S. Desai, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quanta Services, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2023

By: /s/ JAYSHREE S. DESAI
Jayshree S. Desai
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION

PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Each of the undersigned officers of Quanta Services, Inc. (the “Company”) hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to such officer’s knowledge that:

(1) the accompanying quarterly report on Form 10-Q for the period ending June 30, 2023 as filed with the U.S. Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 3, 2023

/s/ EARL C. AUSTIN, JR.

Earl C. Austin, Jr.
President and Chief Executive Officer

Dated: August 3, 2023

/s/ JAYSHREE S. DESAI

Jayshree S. Desai
Chief Financial Officer