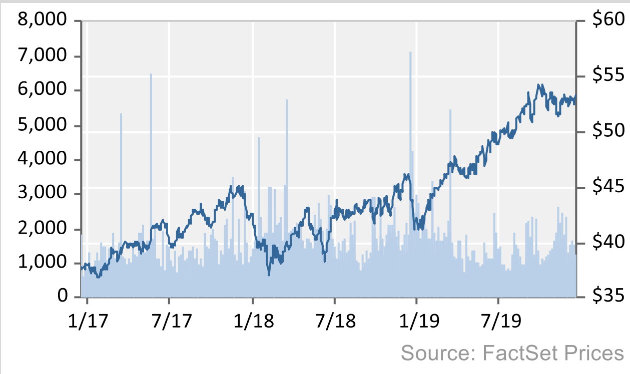
Recommendation: Hold				
Current Price	**$52.92**	---	Ticker	LNT
1 Year Bear	$30	*-18%*	Sh. Out. (M)	244.6
1 Year Base	**$46.03**	***-13%***	M.Cap. ($B)	12.9
1 Year Bull	$59	*23%*	EV ($B)	19.7

Utilities, Electric Utilities

Alliant Energy

Price History



	5Y	3Y	2Y	LTM	YTD	3M	1M
Return	70%	42%	20%	18%	26%	3%	1%

Financials

	2015	2016	2017	2018	2019	2020F	2021F
Sales($B)	**3.25**	**3.32**	**3.38**	**3.54**	**3.68**	**3.76**	**3.85**
Gr. %	*-2.9%*	*2.0X%*	*1.8%*	*4.5%*	*4.2%*	*2.0%*	*2.5%*
Cons.	-	-	-	-	-	*5.0%*	*4.4%*
Ind.	*-4.6%*	*0.7%*	*2.9%*	*4.2%*	*4.3%*	*3.1%*	
EPS	**$1.68**	**$1.90**	**$1.99**	**$2.19**	**$2.31**	**$2.40**	**$2.53**
Gr. %	*-4.5%*	*13.4%*	*4.7%*	*10.1%*	*5.5%*	*3.9%*	*5.2%*
Cons.	-	-	-	-	-	*4.8%*	*6.2%*
Ind.	*-8.6%*	*-9.9%*	*17.5%*	*9.35%*	*6.26%*	*5.0%*	*4.09%*

Ratios

	2015	2016	2017	2018	2019	2020F	2021F
NPM	**11.6%**	**13.0%**	**13.5%**	**14.5%**	**14.7%**	**15.2%**	**15.6%**
Ind.	*9.37%*	*8.97%*	*10.1%*	*13.7%*	*13.2%*		
ROE	*10.7%*	*10.8%*	*10.8%*	*11.2%*	*11.1%*	*11.0%*	*10.9%*
Ind.	*9.1%*	*7.9%*	*9.1%*	*12.0%*	*10.2%*		
ROA	*3.1%*	*3.3%*	*3.3%*	*3.5%*	*3.4%*	*3.4%*	*3.4%*
Ind.	*2.5%*	*2.1%*	*2.4%*	*3.3%*	*3.3%*		
A T/O	0.26	0.26	0.25	0.24	0.23	0.22	0.22
A/E	3.34	3.24	3.26	3.23	3.36	3.25	3.22

Valuation

	2015	2016	2017	2018	2019	2020F	2021F
P/E	18.61	23.16	21.41	19.29	22.91	22.05	20.92
Ind.	17.74	22.32	20.62	15.16	23.31		
P/S	2.16	2.59	2.89	2.79	3.52		
P/B	1.90	2.23	2.35	2.17	2.67	2.63	
P/CF	8.08	10.01	9.95	18.70	11.10		
EV/EBITDA	11.38	12.99	13.45	13.27			
D/P	*3.5%*	*3.1%*	*2.9%*	*3.2%*	*2.7%*		

Summary

I recommend a hold rating with a target of $46.03. Although LNT has an opportunity to increase regulatory asset base through renewable energy initiatives, declining authorized rates of return and fully valued multiples represent significant headwinds. This uncertainty seriously offsets my optimism that the core business can continue delivering higher than average sales growth. The stock is overvalued based on relative and DCF analysis.

Key Drivers

- Capital Spending: Investments in the core utility business raise the regulatory asset base, which drives EPS growth. In the near term, above average capital spending should support earnings growth, but be should offset by the forecasted downtrend set to begin in 2020
- Favorable Regulation: LNT operates in a favorable regulatory environment. Support from legislature and commissions should continue to drive earnings growth, but declining allowed rates of return may impact future performance
- Renewable Energy Initiatives: Alliant's renewable MW capacity as a percent of total MW capacity is significantly higher than its peers. Rising RPS requirements may drive growth; however, rapid depreciation of these assets could affect earnings
- Competition: LNT is well positioned to capture increased sales as a result of growing industrial usage. However, significant exposure to industrials could lead to more volatility in a weakening economy given the industrial's cyclical nature

Valuation

Using a relative valuation approach, Alliant Energy appears to be overvalued in comparison to the utility industry. DCF analysis implies that the stock is worth $42.69. A combination of the approaches suggests that Alliant is overvalued, as the stock's value is about $46.03 and the shares trade at $52.92.

Risks

- Regulatory lag may impact LNT's ability to achieve authorized ROE
- Operating results may fluctuate in abnormal weather conditions
- Inability to maintain dividend growth in economic downturns

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Company Overview

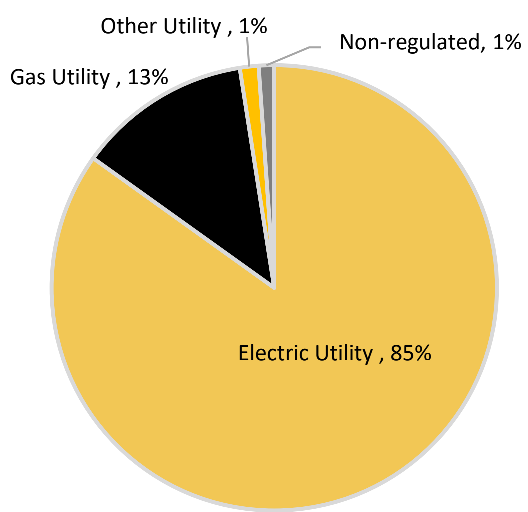
Alliant Energy Corp. (NYSE: LNT) is an investor-owned public utility holding company headquartered in Madison, WI. Through its two principal subsidiaries, Alliant engages in the generation and distribution of electricity and the distribution and transportation of natural gas to customers in the Midwest. Interstate Power & Light Co. (IPL) and Wisconsin Power & Light Co. (WPL) conduct business in 54,000 square miles across Iowa and Wisconsin. Alliant Energy Corp. operates 42,600 miles of electric distribution lines and 9,700 miles of natural gas main lines. LNT also owns approximately 16% equity interest in American Transmissions Company (ATC), holds naming rights to the Alliant Energy Center in Madison, WI, and is the parent company of other relatively small subsidiaries.

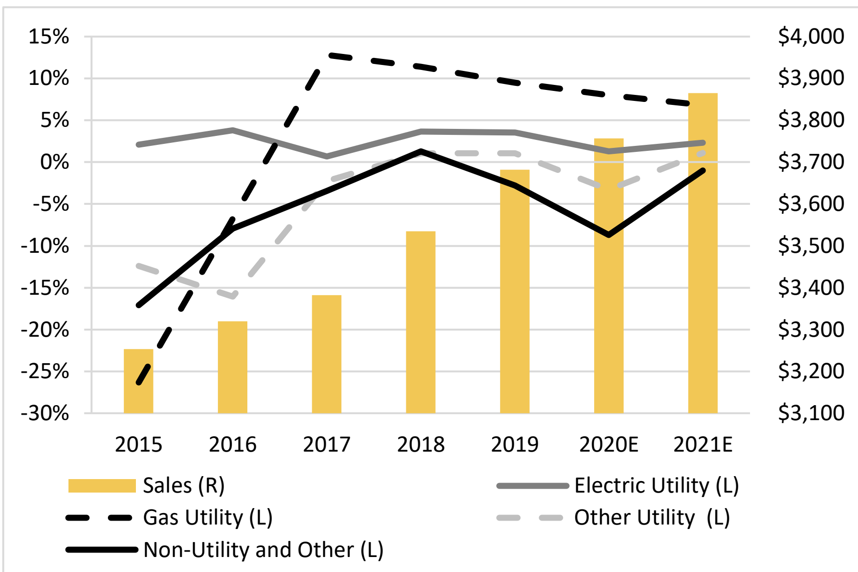
LNT delivers energy solutions to more than 1.3 million customers through its utilities and corporate services segment. Revenue is also generated from various other segments describe below.

Utilities and Corporate Services earnings increased 16.6% YoY

1) Utilities and Corporate Services: The utility business is Alliant's primary source of earnings. IPL and WPL own various energy generating units located in Iowa, Wisconsin, and Minnesota. Alliant's EGU's are fueled with a mix of natural gas, coal, and renewable resources. In addition to its electricity services, LNT procures natural gas from suppliers to provide natural gas to its customers. IPL mainly serves the Iowa market, but also sells wholesale electricity to customers in Illinois and southern Minnesota. WPL mainly serves the Wisconsin market.
    - From 2017 through 2018, earnings in this segment increased by 16.6%, primarily due to IPL's and WPL's rising rate base.
2) ATC Holdings: American Transmission Company (ATC) operates transmissions systems in the upper Midwest. This segment reports Alliant's 16% equity interest in ATC.
    - From 2017 through 2018, earnings in this segment increase by 11.8%.
3) Non-utility Business and Parent: LNT's other holdings such as Alliant Energy Finance LLC and Alliant Energy Transportation, among others, report operations under this segment.
    - From 2017 through 2018, earnings in this segment decreased by 14.5%.

Figures 1 and 2: Revenue sources for LNT, year-end 2018 (left); Revenue history since 2014 and forecasts (right)





Source: FactSet

Business/Industry Drivers

Though several factors may contribute to Alliant's future success, the following are the most important business drivers:

1) Capital Spending
2) Favorable Regulation
3) Renewable Energy Initiatives
4) Competitor Analysis
5) Macroeconomic Trends

<u>Capital Spending</u>

Total capital spending over the next four years may increase EPS by $0.88, all else equal

Investments in the core utility business have been long time catalysts for growth in Alliant's base rate, which ultimately drives EPS. Regulated utility revenue is determined by the revenue requirement formula, which consists of net fixed assets times the regulated return on equity, plus all other expenses. To generate higher earnings, regulated utiliies must make investments. The company's capital expenditures are estimated to exceed $5 billion from 2019 through 2022.

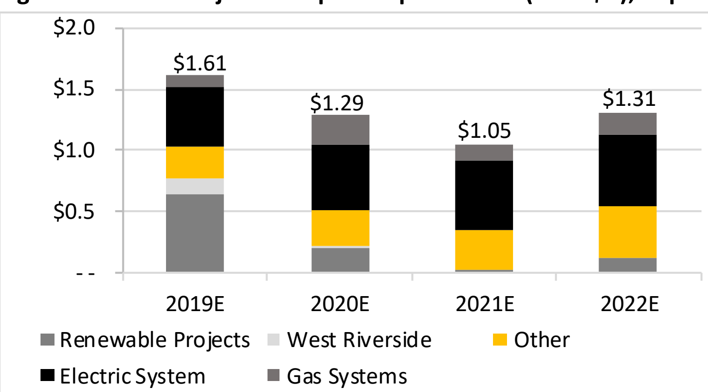
- ($5.1 billion capex * 51.0% equity * 9.5% ROE * (1-15% tax rate) = (210,030,750 / 237,521,000 current shares = $0.88 EPS increase

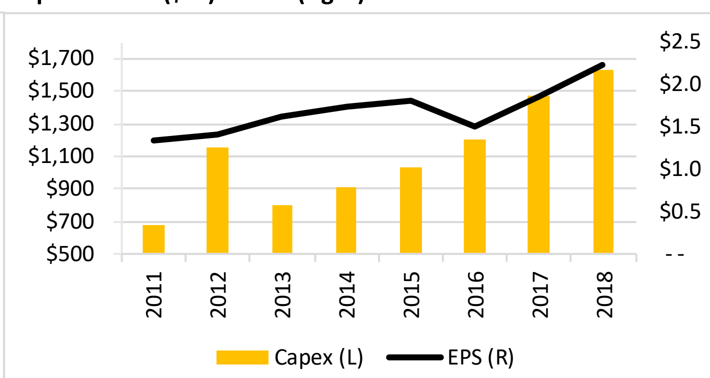
By 2022, LNT plans to spend a total of $2.2 billion in electric distribution system upgrades to enhance operational efficiency and add capacity to areas of growth potential. With 41% of capital spending in the next four years focused on electric distribution, this investment is the largest contributor to future EPS growth.

In the near term, above average levels of capital spending will support EPS growth

The expansion of Iowa wind farms is expected to generate energy for 430,000 homes and contribute to its renewable enegy intitiatives. In addition to the investments in electric distribution upgrades, LNT is currently investing $1.8 billion to increase wind generation capacity. This investment will add 1,000 MW of renewable energy capacity and is expected to be completed by early 2020. An additional $0.2 billion investment in the west riverside project is expected through its completion by early 2020. It is important to note that all projects have received regulatory approval. In the past few years, capex growth has supported EPS growth, but is expected to peak in 2019. EPS may be affected by the forecasted capex downtrend, set to begin in 2020.

Figures 3 and 4: Projected Capital Expenditures (left - $B); Capital Expenditures ($M) vs EPS (right)





Source: FactSet, Company reports

2019 capital expenditures should boost earnings per share by $0.29. Though, this is not discounting for future equity issuance, changes in allowed ROE, and the expiration of wind tax credit this year.

- ($1.6 billion capex * 51.0% equity * 9.5% ROE * (1-11% tax rate) = (68,992,000 earnings / 237,521,000 current shares = $0.29 EPS increase

Capital spending in 2019 is projected to increase EPS by $0.29, all else equal

Figure 5: Projected Capital Expenditures Breakdown ($B)

	2019E	*2020E*	*2021E*	*2022E*
Renewable Projects	$0.6	$0.2	$0.0	$0.1
West Riverside	$0.1	$0.0	$0.0	$0.0
Other	$0.3	$0.3	$0.3	$0.4
Electric System	$0.5	$0.5	$0.6	$0.6
Gas Systems	$0.1	$0.2	$0.1	$0.2
Total	**$1.6**	**$1.3**	**$1.1**	**$1.3**

Source: Company Reports

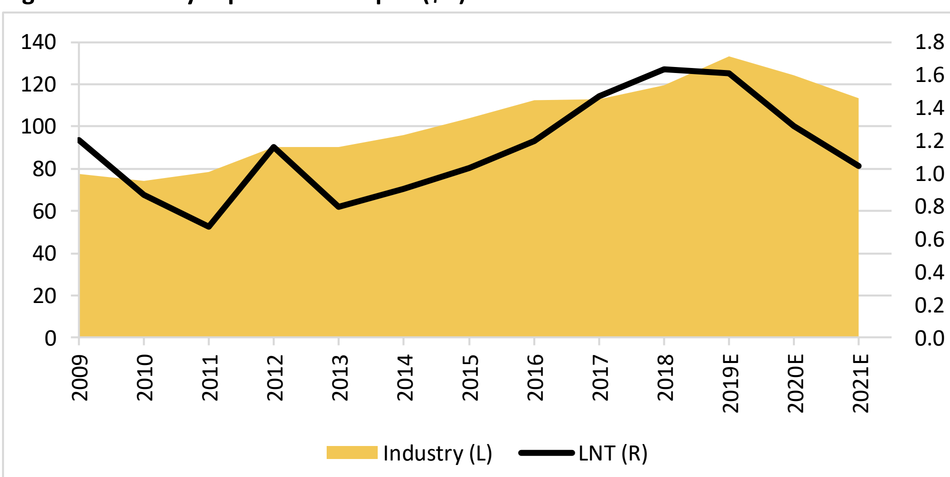
Solely based on projected capital expenditures through 2022, Alliant has the potential to increase EPS by $0.88. Again, this is not discounting for future equity issuance and changes in regulated ROE. I adjusted the tax rate to reflect the expiration of wind tax credits, a 4% tax benefit ending year end 2019.

To finance its 2019 capital expenditures, Alliant has issued $950 million in long-term debt-securities and may issue up to $400 million in common equity (3.25% of market cap). This will make the debt to equity ratio 138.2%, versus 124.2% in 2018. An increase in debt securities indicates higher interest expense in the coming years; however, the current low rate environment should limit the impact**.** Recently, LNT announced that it plans to make a public offering of $195 million in equity, a total of 3.7 million shares. Management intends to use proceeds for general corporate purposes. As a result, I estimate the equity issuance to improve working capital and decrease long-term debt (see forecasts in appendix).

The EEI Institute projects industry capex to peak in 2019, marking an end to the extended building cycle that began in 2009. I anticipate long term growth rates to contract as a result of the capex slowdown.

The EEI Institute projects industry capex to peak in 2019

Figure 6: Industry capex vs LNT capex ($B)



Source: FactSet, EEI Institute

<u>Favorable Regulation</u>

Sustained regulatory support drives earnings growth

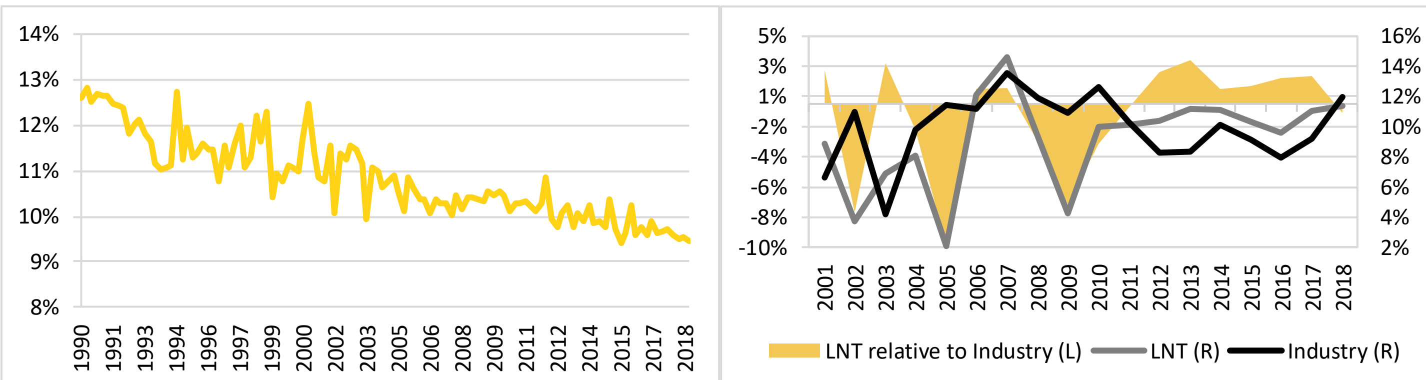
Alliant's utility business is 100% regulated; however, the company operates in a favorable regulatory environment. Sustained support from legislature and commissions will continue to drive earnings growth. The IUB (Iowa Utilities Board) and PSCW (Public Service Commissions of Wisconsin) both allow the use of forward test years. Through revenue decoupling, Alliant's forward test year rates hedge against risk of declining demand and sales lost due to energy efficiency mandates; thus, reducing operating risk. Historical test year rates create regulatory lag, as revenue requirement growth is dependent on historical costs and current growth in billing determinants. Growth in revenue is achieved through growth in usage

> Authorized ROE is calculated in one of three ways:
>
> - CAPM
> - Cost of Debt + Equity Premium
> - Solving for r in Gordon Growth Model

when applying historical test year rates. Utilities forced to use historical years are at a disadvantage if growth in costs exceed growth in revenue.

About 1/2 of all investor-owned utilities are still required to use historical test years but increasing popularity in forward test periods over the past 20 years has compressed authorized ROE levels; a change regulatory authority made to reflect lower levels of risk. Regulators set ROE by calculating cost of capital in one of three ways: the capital asset pricing model, cost of debt + equity premium, or backing out "r" from the Gordon Growth Model. There is a positive correlation between authorized ROE and cost of debt, as well as an inverse correlation between authorized ROE and prices. Short term and long-term interest rates have been in a downward trend since the 1990's and market prices have appreciated, resulting in the downward trend of authorized ROE's. I expect regulators will continue to decrease authorized ROE levels as cost of debt falls and prices rise over time.

Figures 7 & 8: Industry Authorized ROE (left); Actual ROE Relative to industry (right)

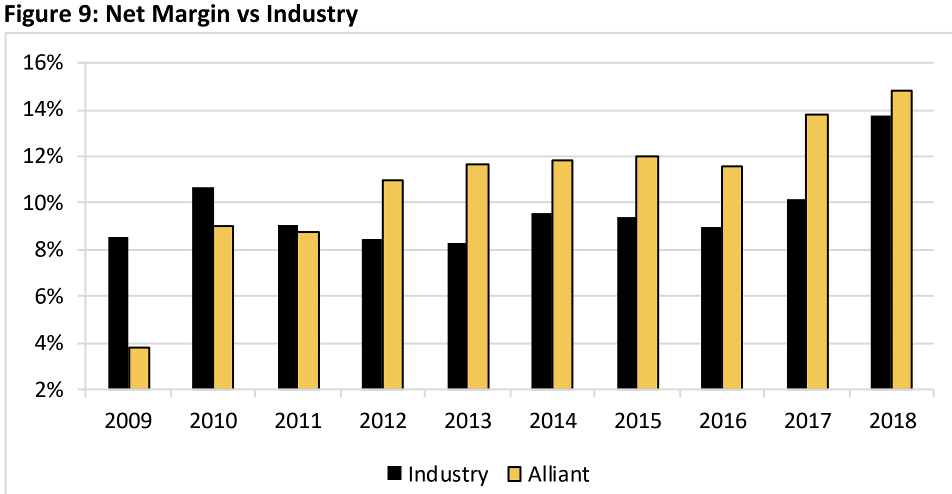


Source: EEI Institute, FactSet

In 2002 and 2005, actual ROE deteriorated due to losses from LNT's deregulated businesses. Since 2011, Alliant has maintained an elevated actual ROE relative to the industry, benefitting from business-friendly conditions. The most recent average authorized ROE for the industry is 9.45%, meanwhile Alliant's weighted average authorized ROE is 10.02% (9.5% for most recent investments). LNT's higher authorized ROE has supported higher net margins versus the industry. A higher ROE ensures that investors earn enough to encourage them to grow the business, too low does the opposite.

> LNT's net margin has benefitted from operating in a business-friendly environment over the past 8 years

Figure 9: Net Margin vs Industry



Source: FactSet

LNT is awaiting final approval of its rate case filed with the IUB in May 2019. IPL subsidiaries seek to increase annual electric rate base by $204 million utilizing a forward test year and increase the equity component of capital structure to 53% from 50%. In a recent development, a unanimous settlement signed by Alliant only includes $127 million increase in electric revenue and 51% equity capital structure. The company is also seeking to add $21 million in revenue through an increase in natural gas rate base. In Wisconsin, WPL and the WPSC agreed to freeze rates at 10% ROE through 2020. Investments in the west riverside project were offset by lower fuel-related costs and federal reform tax credits.

In 2018, approved legislature significantly reduced energy efficiency mandates, thus reducing costs Alliant incurs through these programs. The electric utility industry has collected $3 billion since 1990 in energy efficiency costs levied to customers but incurred $600 million in expenses to administer the programs. Cutting energy efficiency costs means customers will pay less to help finance rebates and other incentives for consumer purchase of energy efficiency appliances. As a result, utilities can now cut down this cost and focus on preferred capital expenditures to drive rate base growth.

Renewable Energy Initiatives

LNT's $1.8 billion investment in Iowa wind farms will raise EPS by $0.37

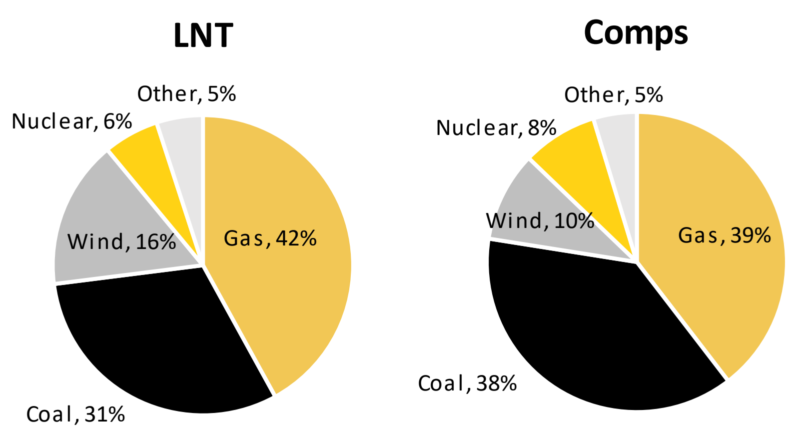
Ownership of renewable energy assets have shown economic benefit. Though renewable assets require significant up-front costs, operating costs are relatively immaterial. In times of weakening demand, renewable assets help maintain margins. The expansion of Iowa wind farms and a recent PPA buyout agreement reflects Alliant's commitment to renewable energy. In September 2020, the company will pay $110 million to end its power purchase agreement with DAEC; costs will be recovered from IPL retail customers over 5 years.

As LNT moves away from coal, exposure to market price volatility is reduced. Alliant's wind capacity consists of 2,269 MWs, or 16% of generation. Comps wind capacity is 10% of total capacity. Over the next five years, I expect LNT's aggressive renewable energy initiatives to benefit earnings, as large upfront windmill costs will raise the rate base. Alliant's $1.8 billion investment in Iowa wind farms will raise EPS by $0.37, all else equal.

- ($1.8 billion capex * 51.0% equity * 11.4% ROE * (1-15% tax rate) = ($104,652,000 earnings / 237,521,000 currents shares) = **$0.37 EPS increase**

Company management has stressed the importance of continuously improving Alliant's ESG profile. LNT has permanently retired 1,000 MWs of coal since 2005. Management plans to reach 30% renewable MW capacity by 2030 and eliminate coal from its energy mix by 2050. Over the past three years, LNT has increased wind MW capacity by 9.2% compared to only 2.6% from comps.

Figures 10 & 11: LNT MW Capacity (left) & Comps Avg. MW Capacity (right)



Source: Company reports, Bloomberg

The company is strategically positioned to take advantage of favorable renewable energy climate in Iowa through the IPL subsidiary, while focusing on natural gas generation in Wisconsin through the WPL subsidiary. The state of Iowa is currently meeting its renewable portfolio standard (rps). The state of Wisconsin is also meeting its rps of 10% renewable energy, sitting at 10.77% in 2018. However, Wisconsin's rps renewable energy is expected to rise 12%, or 354 GWh. WPL's earnings could significantly rise since it would have to increase renewable generation and earn a regulated return on the investment.

In the long term, renewable energy initiatives could negatively influence earnings. After renewable assets are fully depreciated, power is essentially free. The regulatory authority does not allow a return on fully depreciated assets. However, it is difficult to estimate how long wind farms and solar panels will last and when improvements in technology could mandate new investments.

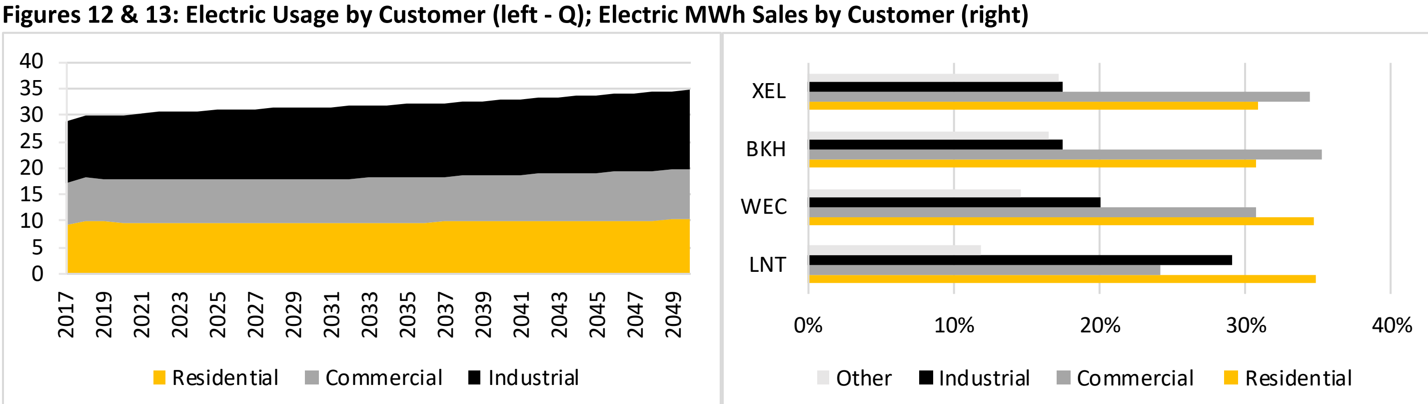
Competitive Positioning

Alliant operates in a regulated geographic monopoly. In Iowa and Wisconsin, customers are unable to choose their electric and natural gas provider. Thus, barrier to entry and competition for customers is relatively non-existent. To achieve higher growth and greater market share, utilities must expand through acquisitions or capital growth. Alliant Energy is growing its portfolio of holdings through relatively small non-utility acquisitions but has lagged in any recent material acquisitions.

In a regulated monopoly, companies gain market share through acquisitions

LNT relies heavily on electric usage of retail and industrial customers; peers dominate wholesale and municipals market. Alliant is well positioned to capture increased sales as a result of growing industrial usage, estimated to rise 16% over the next 30 years. However, significant exposure to the industrial customer segment could lead to more volatility in economic downturns. Earnings could be impacted by the industrial's cyclical nature, which may be why ROE fell drastically in 2008 recession.

Figures 12 & 13: Electric Usage by Customer (left - Q); Electric MWh Sales by Customer (right)

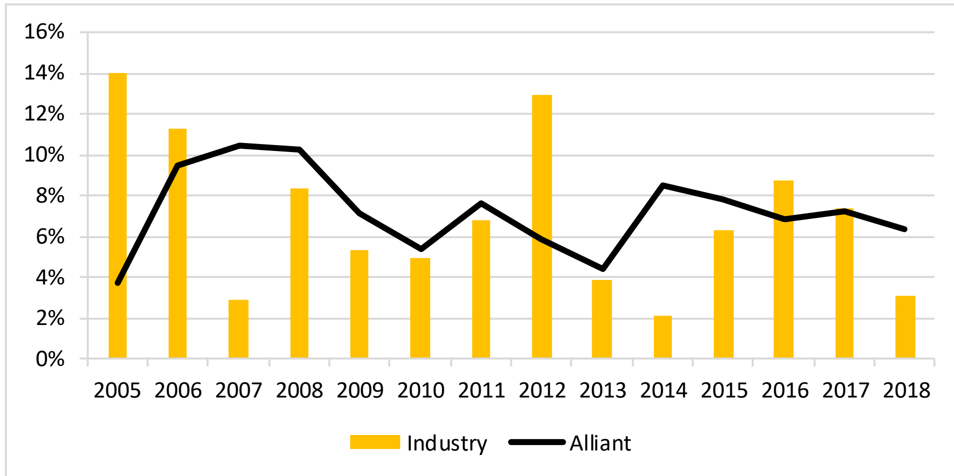


Source: EEI Institute, FactSet

The company has grown dividends faster than the industry. Dividends per share have increased at a 7% CAGR since 2010. Earlier this year, LNT announced a $1.42 target dividend per share, or a 6% increase from 2018's dividend. Maintaining a high dividend growth rate provides a preferred investment to high net worth individuals seeking steady inflows and an alternative to low yielding notes. However, LNT's dividend rose less than the industry during the last recession. Perhaps this could be due to the firm's higher exposure to the industrial sector (note that ROE dipped at the time versus the industry, as shown in figure 7). I suspect Alliant's strong dividend growth may slow in the coming years given we are in the late stages of this cycle.

Dividends per share have increased at a 7% CAGR since 2010

Figure 14: Dividend Growth Rate vs Industry



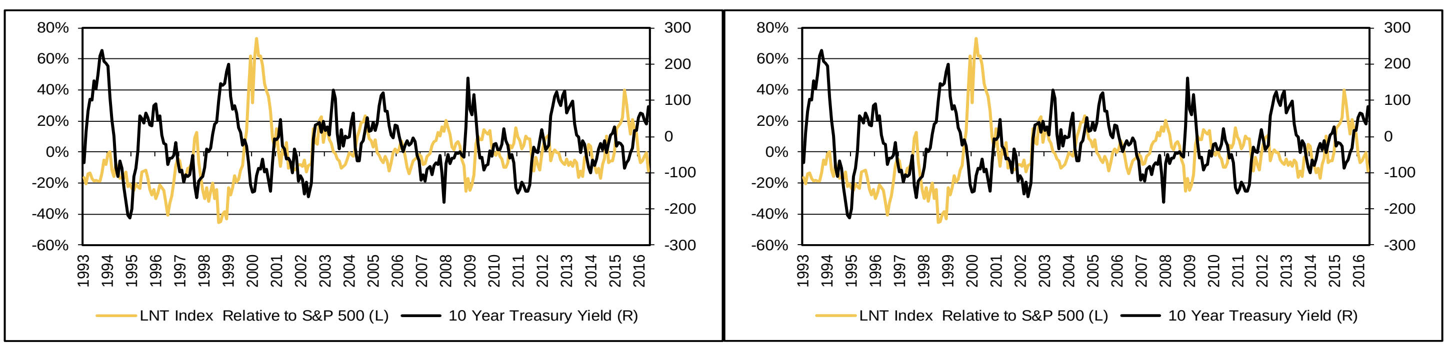
Source: FactSet

Macroeconomic Trends

LNT dividend yield and payout ratio sit just above 2.6% and 61.1%, respectively

The utility industry is negatively correlated to Treasury yields. High dividend yields make utilities an attractive investment in periods of decreasing interest rates. Alliant's dividend yield and payout ratio currently sit at 2.6% and 61.1% respectively. The company's dividend yield is slightly lower than the industry (3.0%), but payout ratio is right on par, suggesting the stock may be overpriced. I anticipate the utility industry to continue generating superior returns relative to the market given current market volatility and suppressed Treasury yields driven by the Fed. The Fed's guidance appears to remain dovish, as three rate cuts have been implemented so far this year.

Figures 15 & 16: LNT Index vs 10 Year Treasury Yield (left-bps); LNT Index Relative to S&P 500 versus 10 Year Treasury Yield (right)

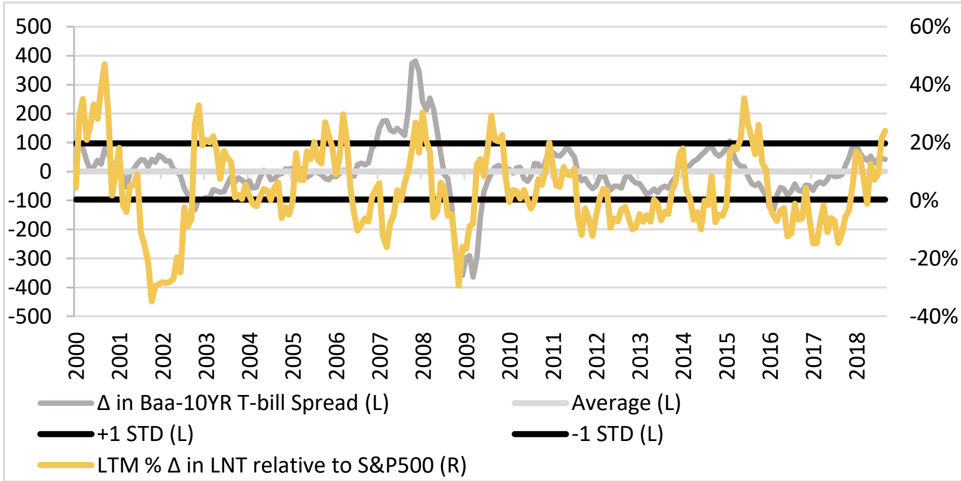


Source: Bloomberg

LNT's Index correlation to 10-year Treasury Yields is -0.24

With historically low treasury yields, a contrarian's point of view would argue that LNT will underperform the market as the 10-year treasury yield reverts to its long-term average. The correlation of LNT Index relative to S&P 500 and 10-year treasury yields is -0.24

Figure 17: LTM percent change in LNT vs LMT change in Baa vs 10-year T-bill spreads (Bps)



Source: FactSet

Alliant's last twelve-month percent change in price relative to the S&P 500 has a correlation of 0.23 against the last twelve-month change in Baa vs 10-year T-bill spreads. Tightening spreads means we are in a risk on market, so utilities should underperform. However, research shows all stocks rise in a risk on market; it is a matter of which stocks outperform on a relative basis.

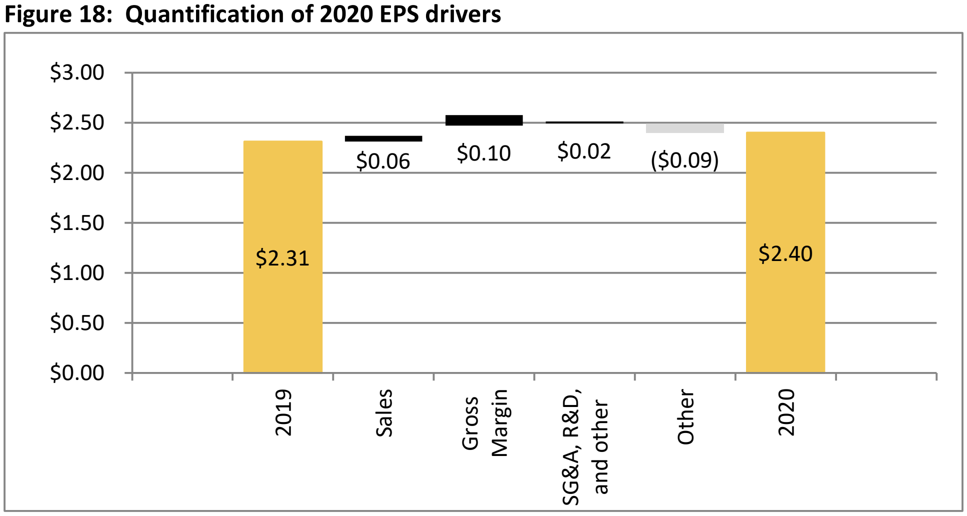
Financial Analysis

2020E EPS:
- *$2.40*

2021E EPS:
- *$2.53*

I anticipate EPS to grow to $2.40 in FY 2020. Since 2018, LNT has sustained above average revenue growth as a result of rising capital expenditures. With capex expected to peak in 2019, I forecast a reversion of the growth trend starting in 2020. Revenue growth should decrease from 4.2% to 2.0%, increasing earnings only by $0.06 as shown in Figure 18. Improvements in electric and gas distribution systems, such as increased monitoring and operational efficiency, should deliver a higher gross margin. I expect gross margin to rise from 52.2% to 55.9%, contributing a further $0.10 to earnings. This is followed by a 0.01% decrease in SG&A/sales, adding $0.02 to EPS. Wind tax credits expire are set to expire year end 2019, which I project to increase Alliant's tax rate from 10.7% to 15.7% in 2020, and years forward. Combined with a slight increase in interest expense and an additional 3.7 million shares issued, much of the gross margin improvement should be offset, reducing EPS by $0.09.

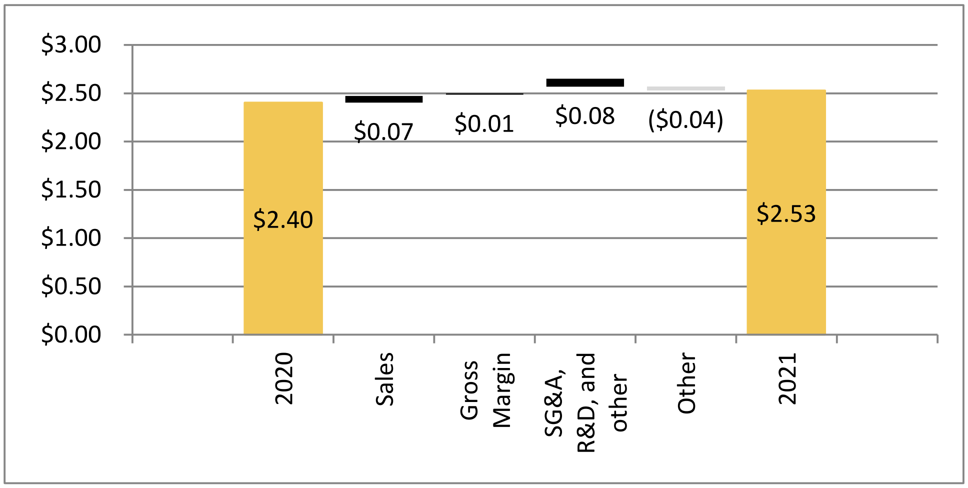
Figure 18: Quantification of 2020 EPS drivers



Source: Company Reports, IMCP

I expect EPS to grow from $2.40 to $2.53 in FY 2021. Revenue growth should slightly improve upon completion of renewable energy projects, contributing $0.07 to earnings. With natural gas system upgrades complete in 2020 and electric system upgrades still underway, I anticipate essentially zero gross margin growth in 2021. As a result, I project gross margin to only add $0.01 to EPS. Higher revenue growth should continue to decrease SG&A/sales, causing EBIT margins to rise to 21.7% from about 21.0%. I anticipate the further $0.08 contribution to be partially offset by the rise in interest expense. Lower capital expenditures and recent equity issues should slow long-term debt growth, thus limiting interest expense negative impact to EPS by $0.04.

Figure 19: Quantification of 2021 EPS drivers

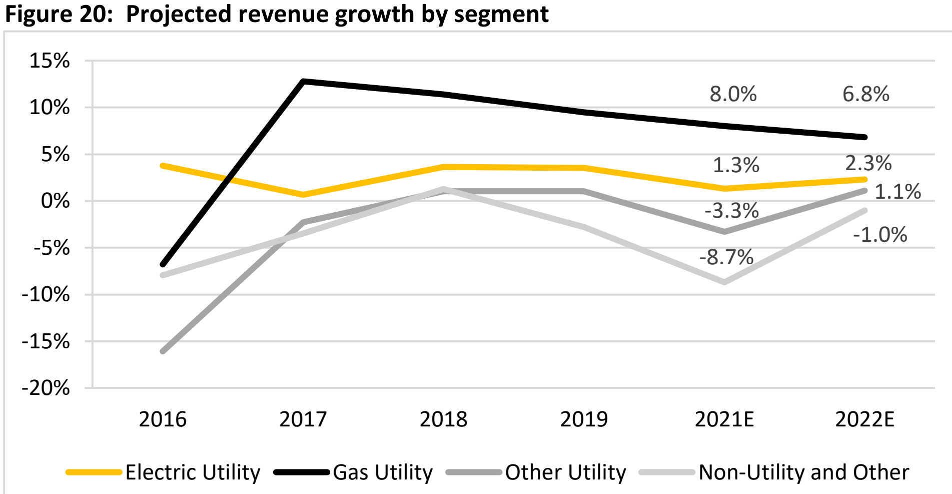


Source: Company Reports, IMCP

<u>Revenues</u>

LNT grows revenue through ambitious customer-focused capital investments. The firm is now spending on renewable capacity and electric system upgrades. Alliant's revenue has averaged 1.8% growth year over year since 2009. In 2017 and 2018, the gas utility segment maintained higher growth levels as a result of rate case approvals, greater sales volume from temperature changes, and upward revisions to costs recovered from energy efficiency programs through the energy efficiency rider. In 2017 and 2018, the electric utility segment experienced modest growth after receiving regulatory approval for higher electric margins due to the construction of several EGU's (Marshall and West riverside).

Figure 20: Projected revenue growth by segment



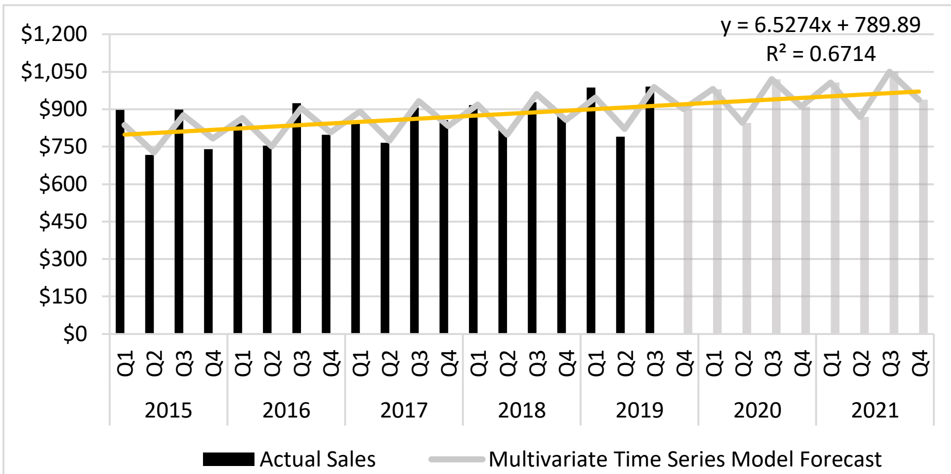
Source: Company Reports, IMCP

I project all revenue segments to continue its downward trajectory through 2020, with a slight rebound in 2021

The company will continue to earn a return on the early retirement of several EGU's, providing a hedge against falling authorized ROE's for new projects. Investments in utility system upgrades and renewables capacity should benefit the electric utility segment moving forward. Shown in figure 20, I project all revenue segments to continue its downward trajectory through 2020, with a slight rebound in 2021.

Given quarterly revenue fluctuates due to climate conditions, I created a multivariate time series model to forecast LNT's revenue over the next two years. The multivariate time series model consists of three components: seasonality, irregularity, and trend. Using quarterly sales dating back to Q1 2015, I extracted seasonality and irregularities from each sales figure to create a regression. I then multiplied the trend by the seasonality component to add back the forecasted fluctuations from quarter to quarter. Lastly, I slightly adjusted down FY 2020 revenue figure to reflect my more bearish outlook versus consensus. I anticipate slower capital expenditures and decreasing authorized ROE's to revert sales growth to just above its long-term average. Zero adjustments were made to FY 2021 forecasts.

Figure 21: Actual Sales vs Forecast ($M)



Source: Company Reports, IMCP

Revenue and EPS Estimate

Figure 22 highlights my less optimistic view on LNT's revenue and EPS growth relative to consensus. Consensus is projecting higher than average revenue growth to continue through 2021, a trend that I project to revert. I believe Alliant will experience slower revenue growth in 2020 and slightly rise in 2021. I am more optimistic on some operating improvements, but less optimistic on revenue. Overall, I expect EPS to grow in line with consensus, though I am more optimistic on some operating improvements noted earlier.

Figure 22: Revenue and EPS Estimates

	2019E	2020E	2021E
Revenue Estimate*	$3,682	$3,757	$3,850
YoY Growth	4.2%	2.0%	2.5%
Revenue Consensus*	$3,645	$3,828	$3,997
YoY Growth		5.0%	4.4%
*in millions			
EPS Estimate	$2.31	$2.40	$2.53
YoY Growth		3.9%	5.2%
EPS Consensus Growth	$2.30	$2.41	$2.56
YoY Growth		4.8%	6.2%
EPS Guidance High	$2.33	$2.48	-
EPS Guidance Low	$2.27	$2.34	-

Source: Factset

Return on Equity

Historically, Alliant has generated greater return on equity relative to comps. Since 2016, profit margins have steadily risen due to approved rate cases and improvements in operational efficiency, but this was largely offset by the decreasing asset utilization ratio. Asset utilization for LNT and peers has experienced negative growth due to the industry's extended building cycle. The construction of several EGU's and wind farms has constricted ROA from improving, except for the small increase in 2018. In February 2018, the IPL subsidiary was authorized a $130 million annual revenue increase. This drove ROA to 3.5 percent, and caused ROE to increase from 10.8 percent in 2017 to 11.2 percent in 2018. Utility commissions partially influence the equity multiplier through regulation of the company's capital structure. In 2018, the equity multiplier dipped as Alliant made two public offerings, raising a combined $500 million in equity. Figure 23 reveals LNT has maintained an ROE above comps mainly through profit margin improvements.

DuPont analysis suggests LNT's ROE is driven by profit margins

Figure 23: 3-stage ROE Breakdown[1]

3-stage DuPont	2016	2017	2018	2019	2020E	2021E
Net income / sales	13.0%	13.5%	14.5%	14.7%	15.2%	15.6%
Sales / avg assets	0.26	0.25	0.24	0.23	0.22	0.22
ROA	3.3%	3.3%	3.5%	3.4%	3.4%	3.4%
Avg assets / avg equity	3.24	3.26	3.23	3.26	3.25	3.22
ROE	10.8%	10.8%	11.2%	11.1%	11.0%	10.9%

Source: Company Reports, IMCP

I expect profit margins to continue rising as LNT drives down direct costs by building a smarter grid, according to management's guidance. Asset utilization will dip in 2019 but remain flat through 2021 as slower sales growth is offset by decreasing capital expenditures. I anticipate ROA to remain at historical levels and the equity multiplier to decrease over the next two years. ROE is directly influenced by regulators, thus reducing the risk of large variances year over year. I project a slight decrease in ROE over the next two years due to the dip in equity multiplier, but favorable regulation in Iowa and Wisconsin should continue to maintain Alliant's ROE above the industry average.

Free Cash Flow

The utility industry generally produces negative free cash flows, not counting increases in debt, because of its significant capital investments required to grow the business. LNT's cash flow has been fairly volatile due to sharp changes in NOWC and NFA, producing negative free cash flow to firm (FCFF) over the last four years. Since 2016, LNT's annual rise in capital spending has driven NFA growth at a faster pace than NOPAT. NFA nearly doubled from 2017 to 2018, plunging FCFF in FY 2018.

Per management's guidance, I also expect NOWC improvement to be offset by increasing net fixed assets. FCFF should see a modest increase in FY 2020 as total invested capital growth shrinks; however, the firm will still generate negative free cash flow to firm. I anticipate FCFF to turn positive in 2021 as LNT significantly reduces capex.

[1] See appendix 6 for 5-stage ROE breakdown

The utility industry is extremely capital intensive, which explains LNT's negative FCFF

Figure 24: FCF Analysis FY 2013 – FY 2021E

Free Cash Flow	2015	2016	2017	2018	2019E	2020E	2021E
NOPAT	$473	$462	$573	$620	$662	$665	$704
Growth		*-2.3%*	*24.0%*	*8.3%*	*6.8%*	*0.4%*	*5.9%*
NOWC	(59)	(36)	27	(161)	(33)	(8)	79
Net fixed assets	11,668	12,497	13,283	14,641	15,489	16,404	16,962
Total net operating capital	$11,609	$12,461	$13,310	$14,480	$15,456	$16,396	$17,042
Growth		*7.3%*	*6.8%*	*8.8%*	*6.7%*	*6.1%*	*3.9%*
- Change in NOWC		23	63	(188)	128	25	87
- Change in NFA		828	786	1,358	848	915	558
FCFF		-$389	-$276	-$550	-$314	-$275	$59
Growth			*-29.0%*	*98.9%*	*-42.9%*	*-12.2%*	*-121.5%*
- After-tax interest expense		164	184	221	243	256	273
+ Net new short-term and long-term debt		569	717	663	950	700	620
FCFE		$16	$257	-$108	$393	$168	$406
Growth			*1505.6%*	*-141.9%*	*-464.6%*	*-57.2%*	*141.6%*
FCFF per share		($1.71)	($1.20)	($2.35)	($1.34)	($1.16)	$0.25
Growth			*-29.8%*	*95.6%*	*-43.0%*	*-13.6%*	*-121.5%*
FCFE per share		$0.07	$1.12	($0.46)	$1.68	$0.71	$1.71
Growth			*1487.5%*	*-141.2%*	*-464.0%*	*-57.9%*	*141.6%*

Source: Company Reports, IMCP

Outside of 2018, Alliant's free cash flow to equity (FCFE) has remained positive largely due to significant net new short-term and long-term borrowings over the last four years as well as slower after-tax interest expense growth. My analysis shows FCFE declining in 2020 caused by lower cash from net new borrowings. I anticipate a significant rise in 2021 as FCFF turns positive.

Valuation

Target Price:

- *$46.03*

Recommendation:

- *Hold*

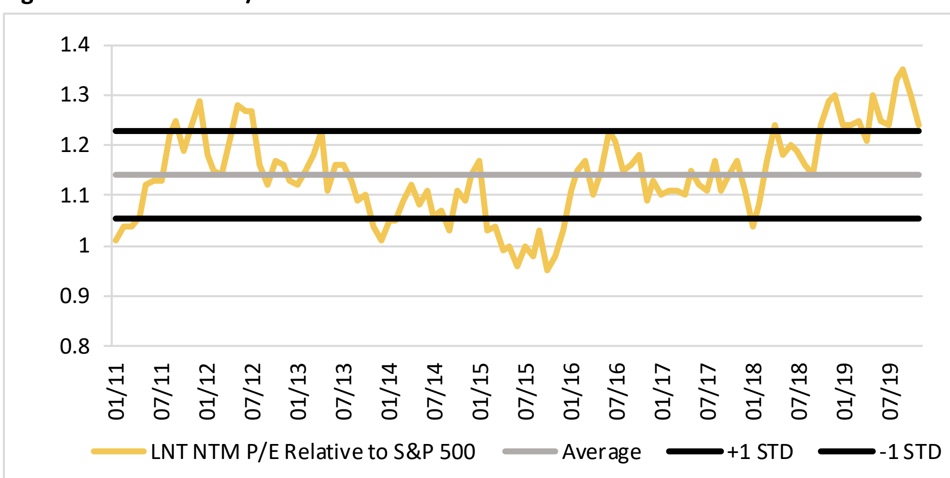
LNT was valued using a one year EPS outlook, detailed 3-stage DCF model, and relative valuation analysis. Overall, my valuation approach focuses on industry relevant multiples such as P/B, P/E, and dividend yield. I also use ROE and EPS weights in the relative valuation section to reflect the influence of regulated earnings. NTM P/E and 2021E EPS reveal a one-year discounted price of $47.89, a ˜9.6 discount to today's price. Using a 2.05 P/B terminal value, I calculated an absolute valuation within the 3-stage DCF pricing LNT at $42.69, a ˜11.8% discount to today's price. A P/B relative valuation regression based on ROE points towards downside potential, pricing the stock today at $50.86. Finally, I determined a final target price weighting EPS outlook, P/B regression, and 3-stage DCF model at 25%, 25%, and 50% weights, respectively. The weighted average of these valuation methods leads to a target price of $46.03 by FY 2020.

<u>Trading History</u>

LNT is currently trading well above its ten-year average NTM PE relative to the S&P 500. As the market reaches late stages of the cycle, investors seek safety in defensive stocks such as Alliant. The stock has greatly benefitted from the market's PE expansion in 2019. The company's absolute PE peaked at 23.36 in late 2019. However, PE's are likely fully valued and will remain flat through 2020. Mean reversion theory suggests a pessimistic outlook for LNT's PE, highlighted in figure 25. Alliant's current NTM PE is 21.99, compared to its five-year average of 19.13. While I expect modest earnings growth in 2020, I forecast LNT's PE to remain the same as markets have already priced in next year's growth.

Alliant has greatly benefitted from the market's PE expansion in 2019

Figure 25: LNT NTM P/E Relative to S&P 500



Source: Factset

Assuming the company's NTM PE lowers to 19.9 through the end of 2020, it should trade at $50.35 by the end of the year based on my 2021 EPS estimate:

- Price 2020E = NTM P/E x EPS 2021E = 19.9 x $2.53 = $50.35

Discounting this one-year price estimate back to today would yield a current price expectation of $50.65 assuming a cost of equity of 5.14% (explained in Discounted Cash Flow section). Given

- Price(Today) = Price(2020E) / (1+Cost of Equity)^1 = $50.35 / (1+0.0514) = $47.89

In today's low interest rate environment, investors are pursuing utilities as a proxy for income, pushing up prices in the broader sector

Relative Valuation

Figure 26 provides an illustration of Alliant's past performance within its peer group. LNT is currently trading at a slightly higher TTM P/E than its peer group average, with a TTM P/E of 23.7 compared to an average of 23.3. Utilities' strong performance this year is partially credited to the aggressive P/E expansion across the market. Though Alliant's P/E may not be overvalued relative to peers, the P/E of the utility sector is currently far above historical averages. Alliant's P/B ratio is currently trading in the upper range of its peer group, indicating limited room for expansion. However, bulls would argue P/B will continue to be supported by LNT's highest ROE within its peer group, but a high ROE because of temporarily low tax rate.

In today's turmoil markets, investors are willing to pay a premium for the safety utilities provide. LNT's dividend yield and payout ratio are at about the industry average. Alliant's dividend growth rate plunged relative to peers in the last recession[2], posing a risk to future performance.

LNT's net profit margin and operating margin are the highest in its peer group, suggesting the company's high P/S ratio is justified. Alliant's P/S ratio is currently trading at 3.52, compared to an average of 3.07.

Figure 26: LNT comparable companies as of 12/15/2019[3]

Comp Sheet (12/15/2019)																	
	Current	Market	Price Change				Earnings Growth								LT Debt/	LTM Dividend	
Ticker	Price	Value	3 Mo	6 Mo	52 Wk	YTD	LTG	NTM	2018	2019	2020	2021	Pst 5yr	Beta	Equity	Yield	Payout
LNT	$52.93	$12,947	2.5	7.5	14.8	25.3	5.2	10.9%	10.1%	5.5%	3.9%	5.4%	6.3%	0.21	111.7%	2.68%	62.8%
WEC	$89.18	$28,131	(2.2)	6.7	19.0	28.8	6.6	-3.1%	-11.9%	5.7%	5.9%	7.0%	5.9%	0.13	108.4%	2.66%	67.1%
XEL	$62.26	$32,648	(0.6)	4.7	16.0	26.4	5.4	9.3%	9.8%	6.1%	6.1%	6.5%	5.3%	0.21	140.1%	2.59%	63.8%
ALE	$79.36	$4,100	(8.9)	(6.3)	(2.0)	4.1	7.0	-5.8%	0.0%	5.6%	4.8%	10.7%	5.2%	0.22	64.7%	2.93%	61.0%
BKH	$77.15	$4,741	1.7	(0.7)	14.2	22.9	3.9	-1.1%	45.2%	-25.1%	5.7%	6.2%	12.4%	0.11	131.1%	2.68%	55.4%
Average		$16,513	(1.5)	2.4	12.4	21.5	5.6	2.0%	10.6%	-0.4%	5.3%	7.2%	7.0%	0.18	111.2%	2.71%	62.0%
Median		$12,947	(0.6)	4.7	14.8	25.3	5.4	-1.1%	9.8%	5.6%	5.7%	6.5%	5.9%	0.21	111.7%	2.68%	62.8%
SPX	$3,169		5.4	9.6	19.6	26.4			23.6%	1.3%	7.2%	7.7%					
	2019		P/E							2019			Current			Sales Growth	
Ticker	ROE	P/B	2017	2018	2019	TTM	NTM	2020	2021	NPM	P/S	OM	ROIC	EV/EBIT	P/CF	NTM	Pst 5yr
LNT	11.7%	2.67	21.4	19.3	22.9	23.7	21.4	22.1	20.9	15.3%	3.52	19.6%	5.7%	23.0	11.1		1.5%
WEC	11.2%	2.82	17.5	20.7	25.3	25.8	26.6	23.8	22.3	13.6%	3.44	18.6%	5.6%	23.6	13.2	3.8%	11.2%
XEL	10.5%	2.48	21.4	19.9	23.8	24.9	22.8	22.4	21.0	11.6%	2.75	17.0%	4.7%	21.6	10.5	3.2%	1.1%
ALE	8.4%	1.86	22.0	22.6	22.2	20.8	22.1	21.2	19.2	14.1%	3.13	13.3%	4.9%	26.8		-13.7%	8.0%
BKH	9.2%	2.03	18.7	13.5	22.1	21.2	21.4	20.9	19.7	11.4%	2.53	22.6%	5.3%	16.9	10.9		6.6%
Average	10.2%	2.37	20.2	19.2	23.3	23.3	22.9	22.1	20.6	13.2%	3.07	18.2%	5.2%	22.4	11.4	-2.2%	5.7%
Median	10.5%	2.48	21.4	19.9	22.9	23.7	22.1	22.1	20.9	13.6%	3.13	18.6%	5.3%	23.0	11.0	3.2%	6.6%
SPX			20.6	15.6	19.5			18.2	16.9								

Source: IMCP, Factset

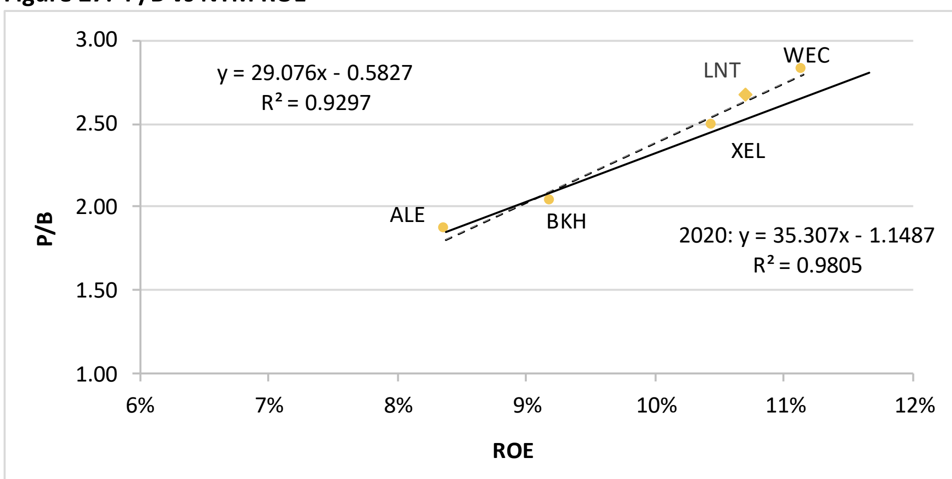
[2] Refer to Figure 14, [3] Refer to Appendix 8 for full comp sheet

A more thorough analysis of P/B and ROE is shown in figure 27. The calculated R-squared of the regression indicates that over 92.9% of a sampled firm's P/B is explained by its 2019 ROE. LNT has the highest ROE and second highest P/B of this grouping. The regression implies LNT's P/B is slightly overvalued, indicating downside risk. However, if the curve steepens, as fears of recession increase and investors pay up for more safety, LNT's high ROE looks to be more appropriately valued. I steepened the slope of the regression line, yielding a new equation for finding P/B.

- Target P/B = Estimated 2020 ROE (11.01*%) x 35.307 - 1.1487 = 2.74
- P/B Appreciation = Target P/B (2.74) / Current P/B (2.67) = 1.03%
- Target Price = Estimated P/B Appreciation (1.03%) x Current Price ($52.93) = $53.48

Discounting back to the present at a 5.14% cost of equity leads to a target price of $50.86 using this metric.

Figure 27: P/B vs NTM ROE



Source: IMCP, Factset

For a final comparison, I created a composite ranking of several valuation and fundamental metrics. Since the variables have different scales, each was converted to a percentile before calculating the composite score. A 75% weight was applied into 2020 earnings to reflect the impact of earnings regulation on fundamentals; the other 25% was applied to 2019 ROE. I applied the greatest valuation weight to P/B because it is theoretically tied to ROE and relevant to asset intensive firms such as Alliant. The remaining 30% was distributed into 2020 P/E and 1/Yield, at 25% and 5% respectively. 1/Yield implies that low yield is high value.

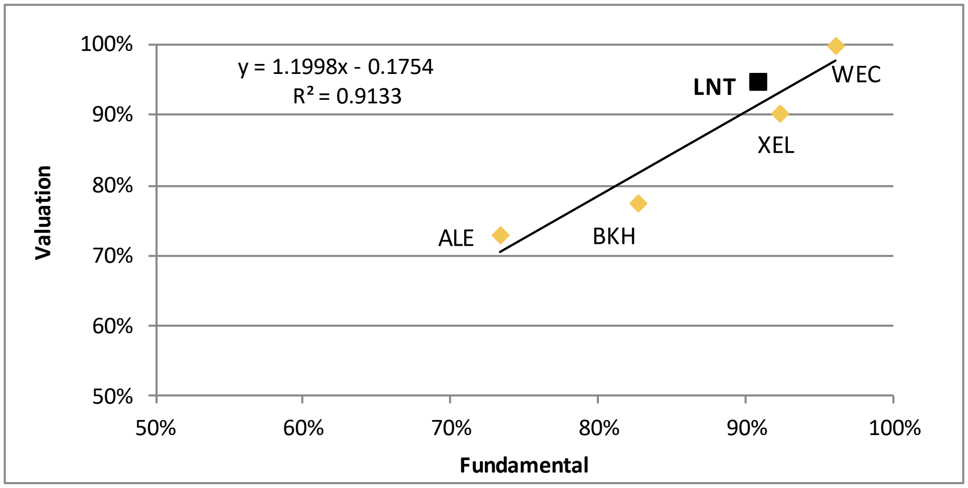
Figure 28: Composite valuation, percentage of range

							Fundamentals		Valuation		
						Weight	25.0%	75.0%	25.0%	70.0%	5.0%
		Rank		Target	Weighted		2020	2019	2020		
Ticker	Name	Diff	Diff	Value	Fund	Value	Earnings	ROE	PE	P/B	1/Yield
LNT	ALLIANT ENERGY CORP	1	-3%	92%	91%	94%	64%	100%	92%	95%	97%
WEC	WEC ENERGY GROUP INC	3	-2%	98%	96%	100%	97%	96%	100%	100%	97%
XEL	XCEL ENERGY INC	4	3%	93%	92%	90%	100%	90%	94%	88%	100%
ALE	ALLETE INC	2	-2%	70%	73%	73%	78%	72%	89%	66%	88%
BKH	BLACK HILLS CORP	5	4%	82%	83%	77%	94%	79%	88%	72%	97%

Source: IMCP, Factset

Composite relative valuation conclude LNT's multiples are fully valued as a function of fundamentals

Figure 29: Composite Relative Valuation



Source: Factset

Based on fundamentals, figure 29 reveals LNT is somewhat expensive relative to peers.

<u>Discounted Cash Flow Analysis</u>

A three stage discounted cash flow model was also used to value LNT.

For the purpose of this analysis, the company's cost of equity was calculated to be 5.14% using the Capital Asset Pricing Model. The underlying assumptions used in calculating this rate are as follows:

- The risk free rate, as represented by the ten year Treasury bond yield, is 1.90%.
- A ten-year beta of 0.40 was utilized since the company has lower risk than the market.
- A long term market rate of return of 10% was assumed, since historically, the market has generated an annual return of about 10%.

Given the above assumptions, the cost of equity is 5.14% (1.90 + 0.40 (10.0 – 1.92)).

Stage One - The model's first stage simply discounts fiscal years 2020 and 2021 free cash flow to equity (FCFE). These per share cash flows are forecasted to be $0.71 and $1.71, respectively. Discounting these cash flows, using the cost of equity calculated above, results in a value of $2.22 per share. Thus, stage one of this discounted cash flow analysis contributes $2.22 to value.

Stage Two - Stage two of the model focuses on fiscal years 2022 to 2026. During this period, FCFE is calculated based on revenue growth, NOPAT margin and capital growth assumptions. The resulting cash flows are then discounted using the company's 5.14% cost of equity.

I assume 2.2% sales growth in 2022, decreasing to 2.1% through 2026. NOPAT margin is expected to rise to 23.0% in 2026 from 20.3% in 2022. NFA turnover should shrink to 0.20 in 2026 from 0.22 in 2022 as a result of slower sales growth and capital-intensive wind investments, offset by slower capex growth in other segments. Finally, I anticipate after-tax interest to continue rising but at a slower rate as LNT reduces net new debt.[4]

[4] Refer to Appendix 7 for detailed DCF analysis

Figure 30: FCFE and discounted FCFE, 2020 – 2026

	2020	2021	2022	2023	2024	2025	2026
FCFE	$ 0.71	$ 1.71	$ 0.05	$ 0.56	$ 0.54	$ 0.47	$ 0.64
Discounted FCFE	$ 0.67	$ 1.55	$ 0.04	$ 0.45	$ 0.42	$ 0.35	$ 0.45

Added together, these discounted cash flows for stage 2 total $1.71.

Stage Three – Book value equity for the years 2022 – 2026 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. BVPS is expected to grow from $22.67 in 2020 to $26.21 in 2026. Dividends should see slower growth in the near future as net income decreases from slower sales and expiring tax credits, slightly offset by an increase in payout ratio.

Figure 31: BVPS estimates for 2020 – 2026

	2020	2021	2022	2023	2024	2025	2026
BVPS	$22.67	$23.54	$23.98	$24.45	$24.93	$25.52	$26.21
Growth		3.8%	1.9%	1.9%	2.0%	2.4%	2.7%

Stage three of the model requires an assumption regarding the company's terminal price-to-book ratio. For the purpose of this analysis, price to book was determined as the best valuation multiple because it normalizes negative CF/NI, common in most utilities due to its capital-intensive nature. Also, it is generally assumed that as a utility's regulated capital growth slows, its P/B will decline. LNT's current P/B is 2.67 and the 10-yr average is 1.83. Moving for the average suggests a P/B of 2.10 is appropriate in 2026.

Factors such as expected payout ratio, risk, growth, and ROE were considered in determining Alliant's P/B terminal value. As markets rattled from a global economic slowdown in 2019, utilities were rewarded by investors' appetite for dividend income in a market with historically low interest rates. I believe this inflated valuation multiples across the sector, including price to book. Investors are currently not pricing in the risk of Alliant's weak dividend growth relative to peers in recessionary periods[5], thus reducing payout ratio, which ultimately reduces P/B. The market is projecting LNT's strong revenue growth to continue, well above its historical and industry average. While favorable regulation should support LNT's high ROE relative to peers in the future, I forecast growth rates to revert as regulated capital growth diminishes due decreasing capex. The market will be quick to price in this reversion, justifying my low P/B terminal value to calculate its fair value.

Given the assumed terminal book value per share of $26.21 and a price to book ratio of 2.10, a terminal value of $55.05 is calculated. Using the 5.14% cost of equity, this number is discounted back to a present value of $38.76.

Total Present Value – given the above assumptions and utilizing a three stage discounted cash flow model, an intrinsic value of $42.69 is calculated (2.22 + 1.71 + 38.76). Given LNT's current price of $52.93, this model indicates that the stock is overvalued.

Figure 32: DCF Summary

Summary (using P/B multiple for terminal value)		
First stage	$2.22	Present value of first 2 year cash flow
Second stage	$1.71	Present value of year 3-7 cash flow
Third stage	$38.76	Present value of terminal value P/B
Value (P/B)	**$42.69**	

Source: Factset

[5] Refer to Figure 14

Scenario Analysis

Bull Scenario:

- *$59.43*

Bear Scenario:

- *$30.20*

Defensive companies such as Alliant Energy generally do not diverge as much from long term trends. However, LNT has historically shown greater volatility versus its peers relative to the market. Changes in the economic cycle, regulatory body, or future price of natural gas are difficult to predict. Therefore, I valued LNT under bull and bear case scenario by changing combinations of five key factors: sales growth, gross margin, S/NFA ratio, terminal P/B, and beta.

Bull: Assuming a lower beta of 0.22 in my CAPM equation reduces the cost of equity to 3.68%, yielding a $0.05 increase to first stage present value. Sustaining strong sales growth assumes that the regulatory body will continue to support capital investments and reverse to above average sales growth by 2023, with sales increasing 3.0%-3.5% through 2026. My base scenario projects NOPAT margin to rise 0.5%-2.0% per year as a result of LNT's investments in operational efficiency, rising to 23.0% in 2026. In contrast, my bull scenario forecasts a 25.0% NOPAT margin by 2026, predicting greater benefit from LNT's electric system upgrades and high margin growth to be supported by above average sales growth. The bull scenario also assumes a constant 0.23 S/NFA ratio through 2023 and dips to 0.22 in 2026, compared to 0.20 S/NFA by 2026 in the base scenario. The combination of these assumptions results in a $6.21 second stage present value. Lastly, a higher terminal P/B assumes investors will be slower to price in highly probable growth slowdown, only decreasing to 2.35 versus 2.10 by 2026 in base scenario. A 2.35 terminal P/B yields $50.94 third stage present value. The combination of these variables gives LNT a *bullish* fair value of $59.43.

Figure 33: Bull Scenario

Summary (using P/B multiple for terminal value)		
First stage	$2.27	Present value of first 2 year cash flow
Second stage	$6.21	Present value of year 3-7 cash flow
Third stage	$50.94	Present value of terminal value P/B
Value (P/B)	**$59.43**	

Bear: Assuming a higher beta of 0.70 in my CAPM equation increases the cost of equity to 7.57%, yielding a $2.13 first stage present value, or $0.09 less than base scenario. Lower than average sales growth assumes that the political landscape in which Alliant operates will turn unfavorable to business growth, and earnings to deteriorate as a result. The bear scenario projects NOPAT margins to remain flat at 18% through 2026 versus 22.1% in base scenario, justified by potential increase in price of natural gas and little to no improvement in operational efficiency. Though, this may be pessimistic given Alliant's significant investments in system upgrades. I expect S/NFA to decrease to 0.20 by 2026 in both bear and base case. I also expect net new debt to remain flat at $500 million annually, versus a general downtrend in base case. The combination of these assumptions yields a $1.11 second stage present value. Lastly, a lower terminal P/B assumes investors will highly value the downward trend in growth in the coming years, decreasing to 1.90 versus 2.10 by 2026 in base scenario. A 1.95 terminal P/B yields $26.95 third stage present value. The combination of these variables gives LNT a *bearish* fair value of $30.20.

Figure 34: Bear Scenario

Summary (using P/B multiple for terminal value)		
First stage	$2.13	Present value of first 2 year cash flow
Second stage	$1.11	Present value of year 3-7 cash flow
Third stage	$26.95	Present value of terminal value P/B
Value (P/B)	**$30.20**	

Business Risks

Regulation:

Financial condition of the regulated investor-owned utility sector is influenced by how regulatory authorities establish the rates companies can charge to customers, authorized rates of return, and common equity levels. My analysis suggest regulatory lag should be reduced using forward test years, but I may be wrong as an unfavorable regulatory body could reverse this practice. As a result, Alliant may experience adverse impacts on their financial condition[6].

Growth strategy based on large capex:

Alliant is pursuing growth through the construction of renewable generating facilities, natural gas-fired generating facility, and other large-scale improvements to generating facilities. Construction of these projects are subject to various risks, including the inability to recover all costs for the projects[6].

Demand for energy may decrease:

Alliant may be affected by the demand for energy in its service territories. Energy demand may decrease due to many things, including economic conditions, loss of service territory or franchises, energy efficiency mandates, and technological advances that increase energy efficiency[6]. My analysis suggests Alliant should not be impacted by decreasing demand for energy given industrial customers are forecasted to grow quickest, which is the company's largest customer segment by electric MWh sales[7]. The EEI Institute predicts a gloomy future for energy demand, thus my analysis could be incorrect. Furthermore, industrial businesses may suffer more during a recession.

Weather

The electric and gas utility businesses are highly seasonal. Alliant is subject to generate less revenues and income when temperatures are warmer in the winter and/ or cooler in the summer, a pattern which can be seen on figure 21. As a result, LNT's operating results in the future may fluctuate substantially on a seasonal basis.

Limitations to LNT's ability to pay dividends

The primary sources of funds for Alliant Energy to pay dividends to its shareowners are dividends and distributions from its subsidiaries. The IPL and WPL subsidiaries have no obligation to pay any amounts to Alliant Energy shareowners, whether by dividends, distributions, loans or other payments. The ability of Alliant's two main subsidiaries to pay dividends will depend on regulatory limitations, earnings, cash flows, capital requirements, and general financial condition of its subsidiaries.

[6] Alliant Energy Corp. 2018 Annual Report, [7] Refer to Figure 13

Appendix 1: Porter's 5 Forces

Threat of New Entrants – Very Low

The regulated utility industry possesses significant barriers to entry. Operating as a natural monopoly, Alliant thrives on substantial capital and regulatory requirements to satisfy its service territory. I do not foresee LNT losing customers as favorable regulation should secure the customer base.

Threat of Substitutes – Low

The regulation authorities of Iowa and Wisconsin support renewable energy solutions through the utility's capital investments. Although government subsidies have decreased price points for self-generating solutions, LNT's customers are unlikely to go off grid given the unfavorable climate condition for solar generation.

Supplier Power - Medium to Low

After technological advancements and a prolonged building cycle, the cost of generating electricity by solar, wind, or natural gas energy has finally reached cost parity[8]. Alliant and its peers now have more control over prices paid for the highly commoditized resource. Looking at the performance of the largest suppliers in the market over the last two years, one can see the markets have punished suppliers for this shift in pricing power.

Buyer Power – Medium

As a natural monopoly, the industry is heavily regulated. The regulatory body enacts strict profitability measures to protect the customer. In Iowa and Wisconsin, customers do not have the choice to switch service providers, but regulators limit what companies charge.

Intensity of Competition – Low

Alliant does not face competition by the nature of its operations. Due to geographical and regulatory limitations, the utility sector does not fight for market share. Low competition should continue, but potential M&A activity could significantly impact the industry.

Appendix 2: SWOT Analysis

Strengths	Weaknesses
High ROE Relative to Peers Favorable Regulation High Net Margin	Negative Cash Flows Falling Demand Overvalued Multiples
Opportunities	**Threats**
ESG Profile Potential Acquisitions EGU Upgrades	Falling Allowed ROE Rising Interest Rates Demand Volatility

[8] Morningstar Equity Research, 18 October 2019

Appendix 3: Income Statement

Income Statement	2015	2016	2017	2018	2019	2020	2021
Sales	$3,254	$3,320	$3,382	$3,535	$3,682	$3,757	$3,850
Direct costs	1,542	1,576	1,510	1,583	1,650	1,657	1,694
Gross Margin	1,712	1,744	1,872	1,952	2,032	2,100	2,156
SG&A, R&D, and other	1,135	1,190	1,201	1,257	1,290	1,311	1,321
EBIT	577	554	671	694	742	789	836
Interest	187	196	216	247	273	304	324
EBT	390	358	456	447	469	485	511
Taxes	70	59	67	48	50	76	80
Income	320	299	389	400	419	409	431
Other	(59)	(133)	(68)	(112)	(122)	(162)	(169)
Net income	378	432	457	512	541	571	601
Basic Shares	225.4	227.1	229.7	233.6	234.0	237.7	237.7
Fully Diluted Shares	225.4	227.1	229.7	233.6	234.0	237.7	237.7
EPS	$1.68	$1.90	$1.99	$2.19	$2.31	$2.40	$2.53
EPS Fully Diluted	$1.68	$1.90	$1.99	$2.19	$2.31	$2.40	$2.53
DPS	$1.10	$1.17	$1.26	$1.34	$1.44	$1.54	$1.66

Appendix 4: Sales Forecast

Sales Forecast						Base Case		Bull Case		Base Case	
Sales	$3,254	$3,320	3,382	$3,535	$3,682	$3,757	$3,865	$3,830	$3,977	$3,739	$3,788
Growth		*2.0%*	*1.9%*	*4.5%*	*4.2%*	*2.0%*	*2.9%*	*4.0%*	*3.8%*	*1.5%*	*1.3%*
Electric Utility	2,771	2,876	2,895	3,000	3,106	3,146	3,219	3,208	3,308	3,134	3,156
Growth		*3.8%*	*0.7%*	*3.6%*	*3.5%*	*1.3%*	*2.3%*	*3.3%*	*3.1%*	*0.9%*	*0.7%*
% of sales	*85.2%*	*86.6%*	*85.6%*	*84.9%*	*84.4%*	*83.8%*	*83.3%*	*83.8%*	*83.2%*	*83.8%*	*83.3%*
Gas Utility	381	355	401	447	489	528	564	534	580	523	554
Growth		*-6.8%*	*12.8%*	*11.4%*	*9.5%*	*8.0%*	*6.8%*	*9.2%*	*8.7%*	*6.9%*	*6.0%*
% of sales	*11.7%*	*10.7%*	*11.9%*	*12.6%*	*13.3%*	*14.1%*	*14.6%*	*13.9%*	*14.6%*	*14.0%*	*14.6%*
Other Utility	58	49	48	48	49	47	47	49	50	47	45
Growth		*-16.1%*	*-2.3%*	*1.1%*	*1.0%*	*-3.3%*	*1.1%*	*1.2%*	*1.2%*	*-3.0%*	*-4.0%*
% of sales	*1.8%*	*1.5%*	*1.4%*	*1.4%*	*1.3%*	*1.2%*	*6.0%*	*1.3%*	*1.2%*	*1.3%*	*1.2%*
Non-Utility and Other	44	41	39	40	39	35	35	39	39	35	33
Growth		*-8.0%*	*-3.5%*	*1.3%*	*-2.8%*	*-8.7%*	*-1.0%*	*1.0%*	*1.0%*	*-9.0%*	*-7.0%*
% of sales	*1.4%*	*1.2%*	*1.2%*	*1.1%*	*1.0%*	*0.9%*	*0.9%*	*1.0%*	*1.0%*	*0.9%*	*0.9%*

Appendix 5: Balance Sheet

Balance Sheet	2015	2016	2017	2018	2019	2020	2021
Cash	6	8	28	21	44	22	41
Operating assets ex cash	821	869	877	764	870	947	1,001
Operating assets	827	877	905	785	914	969	1,042
Operating liabilities	886	913	878	946	947	977	963
NOWC	(59)	(36)	27	(161)	(33)	(8)	79
NOWC ex cash (NWC)	(65)	(44)	(1)	(182)	(77)	(30)	39
NFA	11,668	12,497	13,283	14,641	15,489	16,404	16,962
Invested capital	*$11,609*	*$12,461*	*$13,310*	*$14,480*	*$15,456*	*$16,396*	*$17,042*
Markteable Securities	-	-	-	-	-	-	-
Total assets	*$12,495*	*$13,374*	*$14,188*	*$15,426*	*$16,403*	*$17,373*	*$18,004*
Short-term and long-term debt	3,995	4,564	5,282	5,944	6,894	$7,594	$8,214
Other liabilities	3,690	3,834	3,646	3,750	3,573	3,413	3,233
Debt/equity-like securities	-	-	-	-	-	-	-
Equity	3,924	4,062	4,382	4,786	4,989	5,389	5,595
Total supplied capital	*$11,609*	*$12,461*	*$13,310*	*$14,480*	*$15,456*	*$16,396*	*$17,042*
Total liabilities and equity	*$12,495*	*$13,374*	*$14,188*	*$15,426*	*$16,403*	*$17,373*	*$18,004*

Appendix 6: Ratios

	2015	2016	2017	2018	2019	2020	2021
Profitability							
Gross margin	52.6%	52.5%	55.3%	55.2%	55.2%	55.9%	56.0%
Operating (EBIT) margin	17.7%	16.7%	19.8%	19.6%	20.1%	21.0%	21.7%
Net profit margin	11.6%	13.0%	13.5%	14.5%	14.7%	15.2%	15.6%
Activity							
NFA (gross) turnover		0.27	0.26	0.25	0.24	0.24	0.23
Total asset turnover		0.26	0.25	0.24	0.23	0.22	0.22
Liquidity							
Op asset / op liab	0.93	0.96	1.03	0.83	0.97	0.99	1.08
NOWC Percent of sales		-1.4%	-0.1%	-1.9%	-2.6%	-0.5%	0.9%
Solvency							
Debt to assets	32.0%	34.1%	37.2%	38.5%	42.0%	43.7%	45.6%
Debt to equity	101.8%	112.4%	120.5%	124.2%	138.2%	140.9%	146.8%
Total debt to assets	61.5%	62.8%	62.9%	62.8%	63.8%	63.4%	63.6%
Total liabilities to assets	68.6%	69.6%	69.1%	69.0%	69.6%	69.0%	68.9%
Debt to EBIT	6.92	8.24	7.87	8.56	9.30	9.63	9.83
EBIT/interest	3.08	2.82	3.11	2.81	2.72	2.59	2.58
Debt to total net op capital	34.4%	36.6%	39.7%	41.1%	44.6%	46.3%	48.2%
ROIC							
NOPAT to sales	14.5%	13.9%	16.9%	17.6%	18.0%	17.7%	18.3%
Sales to NWC		(60.64)	(149.32)	(38.61)	(28.41)	(70.18)	911.11
Sales to NFA		0.27	0.26	0.25	0.24	0.24	0.23
Sales to IC ex cash		0.28	0.26	0.25	0.25	0.24	0.23
Total ROIC ex cash		3.8%	4.5%	4.5%	4.4%	4.2%	4.2%
Sales to NOWC		(69.53)	(735.26)	(52.64)	(37.90)	(184.40)	107.76
Sales to IC		0.28	0.26	0.25	0.25	0.24	0.23
Total ROIC		3.8%	4.4%	4.5%	4.4%	4.2%	4.2%
Sales to EOY NWC	(49.98)	(74.77)	(3,758.00)	(19.40)	(47.82)	(125.00)	100.00
Sales to EOY NFA	0.28	0.27	0.25	0.24	0.24	0.23	0.23
Sales to EOY IC ex cash	0.28	0.27	0.25	0.24	0.24	0.23	0.23
Total ROIC using EOY IC ex cash	4.1%	3.7%	4.3%	4.3%	4.3%	4.1%	4.1%
Sales to EOY NOWC	(54.87)	(91.71)	125.27	(21.91)	(111.58)	(485.06)	48.61
Sales to EOY IC	0.28	0.27	0.25	0.24	0.24	0.23	0.23
Total ROIC using EOY IC	4.1%	3.7%	4.3%	4.3%	4.3%	4.1%	4.1%
ROE							
5-stage							
EBIT / sales		16.7%	19.8%	19.6%	20.1%	21.0%	21.7%
Sales / avg assets		0.26	0.25	0.24	0.23	0.22	0.22
EBT / EBIT		64.6%	67.9%	64.4%	63.3%	61.4%	61.2%
Net income /EBT		120.7%	100.4%	114.5%	115.4%	117.8%	117.4%
ROA		3.3%	3.3%	3.5%	3.4%	3.4%	3.4%
Avg assets / avg equity		3.24	3.26	3.23	3.26	3.25	3.22
ROE		10.8%	10.8%	11.2%	11.1%	11.0%	10.9%
3-stage							
Net income / sales		13.0%	13.5%	14.5%	14.7%	15.2%	15.6%
Sales / avg assets		0.26	0.25	0.24	0.23	0.22	0.22
ROA		3.3%	3.3%	3.5%	3.4%	3.4%	3.4%
Avg assets / avg equity		3.24	3.26	3.23	3.26	3.25	3.22
ROE		10.8%	10.8%	11.2%	11.1%	11.0%	10.9%
Payout Ratio		61.7%	63.0%	61.0%	62.4%	64.0%	65.8%
Retention Ratio		38.3%	37.0%	39.0%	37.6%	36.0%	34.2%
Sustainable Growth Rate		4.1%	4.0%	4.4%	4.2%	4.0%	3.7%

Appendix 7: 3-stage DCF Model

First Stage			Second Stage				
Year:	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Sales Growth	*2.0%*	*2.5%*	*2.2%*	*1.9%*	*1.8%*	*2.0%*	*2.1%*
NOPAT / S	*17.7%*	*18.3%*	*20.3%*	*20.7%*	*21.0%*	*22.0%*	*23.0%*
S / NOWC	*(485.06)*	*48.61*	*(50.00)*	*(60.00)*	*(60.00)*	*(70.00)*	*(80.00)*
S / NFA (EOY)	*0.2290*	*0.2270*	*0.2178*	*0.2127*	*0.2095*	*0.2055*	*0.2001*
S / IC (EOY)	*0.23*	*0.23*	*0.22*	*0.22*	*0.21*	*0.21*	*0.20*
ROIC (EOY)	*4.1%*	*4.1%*	*4.4%*	*4.4%*	*4.4%*	*4.5%*	*4.6%*
ROIC (BOY)		*4.3%*	*4.7%*	*4.6%*	*4.6%*	*4.7%*	*4.8%*
Share Growth		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Sales	$3,757	$3,850	$3,935	$4,010	$4,082	$4,164	$4,251
NOPAT	$665	$704	$797	$830	$857	$916	$978
Growth		*5.9%*	*13.1%*	*4.2%*	*3.3%*	*6.9%*	*6.7%*
- Change in NOWC	25	87	-158	12	-1	9	6
NOWC EOY	*-8*	*79*	*-79*	*-67*	*-68*	*-59*	*-53*
Growth NOWC		*-1122.8%*	*-199.4%*	*-15.1%*	*1.8%*	*-12.6%*	*-10.7%*
- Chg NFA	915	558	1105	785	632	777	984
NFA EOY	16,404	16,962	18,068	18,853	19,485	20,262	21,245
Growth NFA		3.4%	6.5%	4.3%	3.4%	4.0%	4.9%
Total inv in op cap	*940*	*645*	*948*	*797*	*631*	*785*	*990*
Total net op cap	*16396*	*17042*	*17989*	*18786*	*19417*	*20202*	*21192*
FCFF	($275)	$59	($151)	$33	$226	$131	($12)
% of sales	*-7.3%*	*1.5%*	*-3.8%*	*0.8%*	*5.5%*	*3.1%*	*-0.3%*
Growth		-121.5%	-354.6%	-122.2%	575.6%	-42.1%	-109.4%
- Interest (1-tax rate)	256	273	288	301	308	318	335
Growth		*6.5%*	*5.5%*	*4.6%*	*2.3%*	*3.2%*	*5.2%*
+ Net new debt	700	620	450	400	210	300	500
Debt	*7594*	*8214*	*8664*	*9064*	*9274*	*9574*	*10074*
Debt / tot net op capital	*46.3%*	*48.2%*	*48.2%*	*48.2%*	*47.8%*	*47.4%*	*47.5%*
FCFE w debt	$168	$406	$11	$132	$128	$112	$153
% of sales	4.5%	10.5%	0.3%	3.3%	3.1%	2.7%	3.6%
Growth		*141.6%*	*-97.2%*	*1078.8%*	*-3.4%*	*-11.8%*	*35.7%*
/ No Shares	237.7	237.7	237.7	237.7	237.7	237.7	237.7
FCFE	$0.71	$1.71	$0.05	$0.56	$0.54	$0.47	$0.64
Third Stage							
Terminal value P/B							
Book value	$5,389	$5,595	$5,700	$5,811	$5,926	$6,067	$6,231
Growth		*3.8%*	*1.9%*	*1.9%*	*2.0%*	*2.4%*	*2.7%*
ROE (EOY book)	*10.6%*	*10.7%*	*8.9%*	*9.1%*	*9.3%*	*9.8%*	*10.3%*
Net income	$571	$601	$509	$529	$549	$598	$643
Dividends	$366	$395	$403	$417	$434	$456	$479
Growth		*8.2%*	*2.0%*	*3.5%*	*4.0%*	*5.0%*	*5.0%*
Shares	237.7	237.7	237.7	237.7	237.7	237.7	237.7
Price		$52.63	$44.57	$46.32	$48.09	$52.36	$56.31
Growth			*-15.3%*	*3.9%*	*3.8%*	*8.9%*	*7.5%*
Terminal P/B							2.10
* Terminal BPS							$26.21
Terminal value							$55.05
* Discount factor							0.70
Discounted terminal value							$38.76

Summary (using P/B multiple for terminal value)		
First stage	$2.22	Present value of first 2 year cash flow
Second stage	$1.71	Present value of year 3-7 cash flow
Third stage	$38.76	Present value of terminal value P/B
Value (P/B)	**$42.69**	

Appendix 8: Comp Sheet

Comp Sheet (12/15/2019)

	Current	Market	Price Change				Earnings Growth					
Ticker	**Price**	**Value**	**3 Mo**	**6 Mo**	**52 Wk**	**YTD**	**LTG**	**2018**	**2019**	**2020**	**2021**	**Pst 5yr**
LNT	$52.93	$12,947	2.5	7.5	14.8	25.3	5.2	10.1%	5.5%	3.9%	5.4%	6.3%
WEC	$89.18	$28,131	(2.2)	6.7	19.0	28.8	6.6	-11.9%	5.7%	5.9%	7.0%	5.9%
XEL	$62.26	$32,648	(0.6)	4.7	16.0	26.4	5.4	9.8%	6.1%	6.1%	6.5%	5.3%
ALE	$79.36	$4,100	(8.9)	(6.3)	(2.0)	4.1	7.0	0.0%	5.6%	4.8%	10.7%	5.2%
BKH	$77.15	$4,741	1.7	(0.7)	14.2	22.9	3.9	45.2%	-25.1%	5.7%	6.2%	12.4%
Average		$16,513	(1.5)	2.4	12.4	21.5	5.6	10.6%	-0.4%	5.3%	7.2%	7.0%
Median		$12,947	(0.6)	4.7	14.8	25.3	5.4	9.8%	5.6%	5.7%	6.5%	5.9%
SPX	$3,169		5.4	9.6	19.6	26.4		23.6%	1.3%	7.2%	7.7%	

	2019		P/E							2019		
Ticker	**ROE**	**P/B**	**2017**	**2018**	**2019**	**TTM**	**NTM**	**2020**	**2021**	**NPM**	**P/S**	**NM**
LNT	11.7%	2.67	21.4	19.3	22.9	23.7	21.4	22.1	20.9	15.3%	3.52	14.8%
WEC	11.2%	2.82	17.5	20.7	25.3	25.8	26.6	23.8	22.3	13.6%	3.44	13.8%
XEL	10.5%	2.48	21.4	19.9	23.8	24.9	22.8	22.4	21.0	11.6%	2.75	10.9%
ALE	8.4%	1.86	22.0	22.6	22.2	20.8	22.1	21.2	19.2	14.1%	3.13	11.6%
BKH	9.2%	2.03	18.7	13.5	22.1	21.2	21.4	20.9	19.7	11.4%	2.53	15.1%
Average	10.2%	2.37	20.2	19.2	23.3	23.3	22.9	22.1	20.6	13.2%	3.07	13.3%
Median	10.5%	2.48	21.4	19.9	22.9	23.7	22.1	22.1	20.9	13.6%	3.13	13.8%
spx			20.6	15.6	19.5			18.2	16.9			

		LT Debt/	S&P	LTM Dividend		P/CF	Sales Growth			Book		EV/
Ticker	**Beta**	**Equity**	**Rating**	**Yield**	**Payout**	**Current**	**NTM**	**STM**	**Pst 5yr**	**Equity**	**ROIC**	**EBIT**
LNT	0.21	111.7%	A-	2.68%	62.8%	11.1			1.5%	$19.82	5.7%	23.0
WEC	0.13	108.4%	A	2.66%	67.1%	13.2	3.8%		11.2%	$31.65	5.6%	23.6
XEL	0.21	140.1%	A-	2.59%	63.8%	10.5	3.2%	2.8%	1.1%	$25.06	4.7%	21.6
ALE	0.22	64.7%	A-	2.93%	61.0%		-13.7%	6.8%	8.0%	$42.65	4.9%	26.8
BKH	0.11	131.1%	B	2.68%	55.4%	10.9			6.6%	$37.94	5.3%	16.9
Average	0.18	111.2%		2.71%	62.0%	11.4	-2.2%	4.8%	5.7%		5.2%	22.4
Median	0.21	111.7%		2.68%	62.8%	11.0	3.2%	4.8%	6.6%		5.3%	23.0
SPX												

	Earnings							Sales				1/
Ticker	**2017**	**2018**	**2019**	**TTM**	**NTM**	**2020**	**2021**	**2018**	**2019**	**TTM**	**NTM**	**Beta**
LNT	$1.99	$2.19	$2.31	$2.23	$2.47	$2.40	$2.53	$3,535	$3,682	$3,641		4.7
WEC	$3.79	$3.34	$3.53	$3.46	$3.35	$3.74	$4.00	$7,680	$8,168	$7,652	$7,943	7.8
XEL	$2.25	$2.47	$2.62	$2.50	$2.73	$2.78	$2.96	$11,537	$11,877	$11,604	$11,980	4.7
ALE	$3.38	$3.38	$3.57	$3.81	$3.59	$3.74	$4.14	$1,499	$1,309	$1,384	$1,194	4.6
BKH	$3.21	$4.66	$3.49	$3.65	$3.61	$3.69	$3.92	$1,754	$1,873	$1,758		8.9
Average												
Median												
SPX	$130.00	$160.64	$162.75			$174.39	$187.85					