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PRESENTATION

Operator

Good day, and welcome to the Duke Energy second-quarter earnings call. Today's conference is being recorded. At this time I'd like to turn the conference over to Mr. Mike Callahan. Please go ahead, sir.

Mike Callahan - Duke Energy Corporation - VP of IR

Thank you, Anna. Good morning, everyone, and welcome to Duke Energy's second-quarter 2016 earnings review and business update. Leading our call today is Lynn Good, Chairman, President and CEO, along with Steve Young, Executive Vice President and Chief Financial Officer.

Today's discussion will include forward-looking information and the use of non-GAAP financial measures. Slide 2 presents the Safe Harbor statement, which accompanies our presentation materials. A reconciliation of non-GAAP financial measures can be found on www.duke-energy.com and in today's materials. Please note the appendix for today's presentation includes supplemental information and additional disclosures.

As summarized on slide 3, Lynn will cover our second quarter financial highlights and provide an update on our portfolio transition and strategic initiatives. Lynn will then provide an update on our coal ash efforts as well as other operational highlights. Then, Steve will provide an overview of our second quarter financial results, an update on low growth trends and recent regulatory activity, before closing with our key investor considerations.

With that, I'll turn the call over to Lynn.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Good morning, everyone, and thank you for joining us today. Let me start on slide 4 and express how pleased I am with our financial results this quarter. This morning, we announced second quarter 2016 adjusted earnings per share of $1.07, an increase of $0.12 from the prior year. We generated higher adjusted earnings and strong results at our regulated utilities, which gives us confidence to reaffirm our full-year guidance for 2016. We also demonstrated our confidence in the strength of our core
In response, North Carolina adopted House Bill 630 to strengthen the 2014 Coal Ash Management Act. The legislation provides important clarifications, keeping final appropriately rank and safely close the basins.

They also highlighted the need for additional time to complete ongoing dam improvement activities and collect additional scientific and engineering data to received updated rankings from the North Carolina Department of Environmental Quality. The rankings established closure methods, timeframes and, ultimately, cost. Underway to close basins at seven sites in the Carolinas, including two sites in South Carolina. For our remaining North Carolina basins, in the second quarter we closure options, including capping the material in place. It also requires the completion of the dam improvement activities and providing access to a permanent

Turning to slide 7, let me update you on the significant progress we made during the quarter on coal ash basin closure. As we have previously discussed, our work is underway to close basins at seven sites in the Carolinas, including two sites in South Carolina. For our remaining North Carolina basins, in the second quarter we received updated rankings from the North Carolina Department of Environmental Quality. The rankings established closure methods, timeframes and, ultimately, cost. They also highlighted the need for additional time to complete ongoing dam improvement activities and collect additional scientific and engineering data to appropriately rank and safely close the basins.

In response, North Carolina adopted House Bill 630 to strengthen the 2014 Coal Ash Management Act. The legislation provides important clarifications, keeping final authority for coal ash oversight with the state environmental regulator and outlining a path to low classifications for many of our basins, which allows for a range of closure options, including capping the material in place. It also requires the completion of the dam improvement activities and providing access to a permanent

In addition, we're proceeding as planned with our process to exit the Latin American generation business. We've received strong interest from a variety of parties. We have since invited a select group of bidders to participate in detailed due diligence, including management presentations and site visits for the purpose of providing final bids. We will continue to provide updates as we move through this process.

Turning to slide 6, I'll provide you with a brief update on our progress executing our $30 billion strategic growth capital plan. Our vision is to invest capital and smarter energy solutions that generate cleaner energy and modernize the grid, creating value for our customers and delivering earnings and dividend growth for our shareholders. Our major generation projects continue to move forward as planned, remaining on time and on budget. In South Carolina, construction of our $600 million Lee natural gas combined cycle plant is progressing well toward a November 2017 in-service date. In Florida, construction has begun on our $1.5 billion Citrus County combined cycle plant and our uprates at Hines are on target for an October 1st in-service date. In addition, we continue to add solar to our regulated generation portfolio. In May, the NCUC approved two new solar projects totaling 65 megawatts in our Duke Energy Carolinas service territory. Both of these projects are expected to be online in the first quarter of 2017.

In Indiana, the state regulatory commission approved our 17 megawatt solar plant at the Crane naval station, the second largest solar power plant in the state. Per Indiana statute, we will recover 100% of the cost of the project via a clean energy investment rider. We also had several positive developments regarding our grid modernization efforts. On June 29, the Indiana commission approved our previously filed settlement agreement for our seven year, $1.4 billion plan to build a smarter energy infrastructure, which is now underway.

In Kentucky, we filed a request to deploy smart meters in our service territory, while in South Carolina we received an accounting order from the Commission allowing Duke Energy Carolinas to defer the cost of smart meter investments until the next rate case. These programs will provide much needed technology and infrastructure upgrades. They build upon our progress in investing in the energy grid and will benefit customers with improved reliability and safety, fewer and shorter power outages and overall energy savings.

Shifting to our commercial portfolio, we continue to advance our two natural gas pipeline projects, Atlantic Coast Pipeline and Sabal Trail. We expect to receive FERC’s notice of schedule for the Atlantic Coast pipeline soon. We still anticipate a FERC order allowing construction to begin by mid-2017, keeping the project on target for a late 2018 in-service date. Meanwhile, you might recall that Sabal Trail received FERC approval in February of this year. Pre-construction work is underway with construction expected to begin in late summer. The project remains on target to be in operation in mid-2017.

We also had success this quarter growing our Commercial renewables fleet. Our 200-megawatt Los Vientos IV wind project achieved commercial operation in July – a month ahead of schedule. Our 200-megawatt Frontier wind project remains on target to begin serving customers later this year. With the acquisition of 55 megawatts of new solar projects, we now have two additional projects in North Carolina and our first in New Mexico. By year-end we expect our Commercial renewables footprint to be approximately 3,000 megawatts.

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alternative drinking water supply for certain residents. This removes any concerns for plant neighbors about potential impacts to their surrounding private drinking wells.

In addition, the legislation directs the construction of ash reprocessing facilities at three sites to make the material suitable for use and concrete. We support recycling ash, which is the only way to avoid permanent storage of this useful construction material.

The timeframes outlined in the new legislation are generally consistent with the requirements of the federal Coal Combustion Residual, or CCR Rule, and work is underway to meet the requirements in the CCR rule and the North Carolina legislation. The new law in North Carolina does not materially affect our current estimated costs for basin closure and we remain committed to safe, sustainable long term solutions for coal ash across all of our jurisdictions.

Moving to Indiana, we filed testimony in June to support our first petition to recover approximately $400 million in costs associated with the federal CCR Rule. Our petition requests that these costs for dry bottom ash conversion projects be recovered under the Indiana Federal Mandate Statute. This statute provides for 80% recovery of project costs through a rider and 20% deferred until the next rate case. Hearings are scheduled for November and we could receive an order by mid-2017. Finally, in July, we filed a request in Kentucky for a Certificate of Public Convenience and Necessity to construct a $23 million dry bottom ash handling system at our East Bend Station.

Before I turn it over to Steve, I'd like to highlight on slide 8 several of our recent operational accomplishments made possible by the dedication of our employees. Our strong generation fleet performance has persisted through the second quarter. Year-to-date our nuclear fleet has achieved a 96% capacity factor. At Oconee Unit 3 in the Carolinas our team set a new record for the shortest outage time, an improvement of 10% over the prior period. In June, the company was recognized by EEI with the association’s emergency recovery award for our outstanding power restoration efforts in the Carolinas following Winter Storm Jonas earlier this year. These efforts were again on display in response to the approximately 550,000 outages caused by Tropical Storm Colin in Florida in June, and powerful wind storms in the Midwest and Carolinas in June and early July. In each of these storms, our teams worked diligently and safely both day and night to restore service as quickly as possible and I commend their commitment to meeting our customers’ needs 24/7.

Also in June, we exceeded the $687 million guaranteed fuel and joint dispatch merger savings, providing a significant benefit to our Carolinas customers as a result of the 2012 Duke and Progress Energy merger. The dedicated efforts of our teams allowed us to complete this important milestone, a full year ahead of our original commitment.

In conclusion, I’m pleased with our financial results for the quarter and our progress in advancing our strategic initiatives as we invest in cleaner and smarter energy solutions for our customers and deliver growth for our investors. We are maintaining a sharp focus on operational excellence, which includes our commitment to safety and cost efficiency. Our portfolio transition enhances Duke's position as an industry leading domestic infrastructure business with stable, transparent earnings and cash flows. We look forward to completing this transition.

Now let me turn it over to Steve.
$0.06 in higher storm-related cost year-to-date, our focus on operational efficiencies and cost savings initiatives position us to achieve our full-year O&M reduction target and helps position us to maintain a flat O&M cost structure through 2020.

Commercial portfolio results increased by $0.01 per share in the second quarter. The higher results were largely driven by increased investments in our share of the Atlantic Coast and Sabal Trail pipelines. Our renewables portfolio was flat compared to the prior year quarter as weaker-than-expected wind resources were lower than historical averages – a trend similar to last year. On a year-to-date basis, our Commercial portfolio is slightly behind our original expectations for the first half of the year. We will continue to monitor this trend throughout the remainder of the year.

Moving on, Other was flat for the quarter as a favorable income tax adjustment resulting from a completed IRS audit was offset by higher interest expense. International’s quarterly earnings declined by $0.02 over last year. Lower earnings at National Methanol were driven by the completion of planned maintenance and lower MTBE prices. Looking ahead, the expansion of the new POM facility at National Methanol has been delayed and is now expected to come online in the second quarter of 2017. As a reminder, once in service, this expansion will reduce our ownership percentage from 25% to 17.5%.

International’s results were also impacted by higher income tax expense. Because of our announcement in early 2016 of our intent to exit our Latin American operations, we no longer expect to permanently reinvest earnings in that business. As a result, we will continue to recognize additional U.S. income taxes up to the point of sale. Stronger results in Brazil, due to improved hydrology, more than offset weaker foreign currency exchange rates.

Overall, it was a solid quarter and we are pleased with our results.

Moving on to slide 10, let’s review our retail customer volume trends. On a rolling 12-month basis, weather-normalized retail load growth was 0.3% through the second quarter and continues to track our long-term expectations of approximately 0.5% load growth. We are particularly pleased with the strength of our residential volume trends, which continue to grow at 0.8% over the last 12 months. Growth has been bolstered by a 1.4% increase in the number of customers. This has more than compensated for the usage reduction by our residential customers due to their increased adoption of energy efficiency and general housing trends. For the first time since the recession, we are beginning to witness single-family housing starts reaching the level of multi-family starts. At a macro level, employment and wage growth were also trending favorably for the residential class.

In our industrial class, we continue to see growth of 0.4% on a rolling 12-month basis. Industries that support construction and automotives remain strong and we are seeing positive signs once again in the chemicals, rubber and plastics industries. A few large industrial customers in the Midwest completed production outages during the quarter, which we believe temporarily impacted growth. Meanwhile, the softer global economy and strength of the U.S. dollar are still impacting companies influenced by exports. Of note this quarter, we saw the renewed strength in sales in the metals sector. In particular, Indiana showed growth in this sector as tariffs on imports have resulted in increased domestic metal production that is critical to the Midwest industrial base. We will continue to closely monitor economic conditions and our customer usage patterns throughout the remainder of the year.

Moving to the commercial class, we experienced a decline of 0.2% over the rolling 12 months. Commercial continues to grow in our Carolinas and Florida jurisdictions, led by gains in non-manufacturing employment and declining office vacancies. However, in the Midwest we see continued declines in the government sector related to the impacts of budget cuts.

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Moving to slide 11, the company recently submitted regulatory filings in South Carolina and Florida. On July 1, we filed a request with the Public Service Commission of South Carolina to increase revenues by about $79 million for Duke Energy Progress, our first rate case in this jurisdiction since 1988. We've made significant investments to build new energy infrastructure to meet the needs of a growing customer base and comply with environmental regulations at both the state and federal levels. These investments allow us to provide affordable, reliable and increasingly cleaner energy to customers. They are key drivers for the proposed increase, which will allow us to recover the costs associated with assets we have placed into service in recent years. These include our H.F. Lee, Smith and Sutton natural gas-fired combined-cycle facilities. They also include the South Carolina retail share of costs from the NCEMPA acquisition, in addition to renewables investments. The hearing will begin on October 31st and, if approved, new rates could go into effect in January 2017.

We have also filed two separate petitions with the Florida Public Service Commission under the generation base rate adjustment mechanism to increase revenues by approximately $70 million. The first petition includes the Hines energy inlet chilling air units, which will provide approximately 220 megawatts of additional capacity to the current plant. The second petition was filed to recover the total revenue requirements associated with the previously approved acquisition of the Osprey generating facility from Calpine. We expect this acquisition to be completed in early 2017.

Also in Florida, I am pleased to announce that we recently completed the securitization of costs associated with our retired Crystal River 3 nuclear plant. By issuing bonds of very attractive interest rates, this transaction will save our Florida customers nearly $800 million over the next 20 years. This financing represents a win-win
solution that allows us to continue making investments in Florida that provide cleaner energy solutions for our customers and, at the same time, help manage the impact to our customers’ bills. I'm proud of our team that worked diligently to create significant value for our customers through this transaction.

I'll close with slide 12. Duke Energy has tremendous scale, offering an attractive investor value proposition, which includes balanced growth in earnings and reliable dividends over time. As Lynn mentioned, we are making good progress on the exit of the Latin American generation business and preparing for the integration of Piedmont. After completion of these strategic transactions, we will operate a portfolio that provides low-risk and high-quality earnings and cash flows to support stable earnings and dividend growth. We are making significant strides in executing on our capital plan, including investing in cleaner energy resources and technologies that modernize our energy grid to provide the enhanced services that our customers expect. And, we are excited about the growth opportunities for natural gas infrastructure across our service territories, particularly in the Southeast.

Our dividend is very important to us. The strength of cash flows generated by our operating companies allows us to continue to target annual growth in the dividend, consistent with our long term 4% to 6% earnings growth objective. We had a good first half of the year and are looking ahead to the third quarter, traditionally our strongest. This gives us confidence to reaffirm our $4.50 to $4.70 adjusted earnings per share guidance range for 2016.

With that, let's open the lines for your questions.

**QUESTION AND ANSWER**

**Operator**

(Operator Instructions)

We'll move first to Jonathan Arnold with Deutsche Bank.

**Jonathan Arnold - Deutsche Bank - Analyst**

On the Latin America sale, can you give us any update on just when you would anticipate this wrapping up? I think you're saying it's --you've gone into the second round already. Is this this quarter or more fourth quarter type of thing?

**Lynn Good - Duke Energy Corporation - Chairman, President & CEO**

Jonathan, it's progressing as we expected. We are targeting an announcement by the end of the year and believe closing is a 2017 event. So, we will give more specifics as we continue through the process. But, we're on pace to achieve that at this point.

**Jonathan Arnold - Deutsche Bank - Analyst**

Okay great. And then on the same topic, I think on the last call you had said that you would sort of give some updated thoughts around likely dilution as the year progressed. And given that we've seen an improvement I guess in the fundamentals and some other aspects, do you have anything new to say on that or should we sort of stick with the prior commentary?

**Lynn Good - Duke Energy Corporation - Chairman, President & CEO**

I think the prior commentary still works, Jonathan. I think until we can talk more specifics on the price and the timing, it's difficult to be more specific at this point. So, we will provide that information when we have clarity and give you the kind of update you'd expect on implications to long-term earnings trajectory.

**Jonathan Arnold - Deutsche Bank - Analyst**

Is it fair to say that you might feel better than you did three months ago, given changes in the marketplace? Or is that just --
Yes, I think your observations of optimism -- we see stronger GDP growth being projected for 2017, working through some of the political issues seems to be moving forward. Of course, the hydrology has returned to normal, so there are a number of positive trends. And, you all watch FX, that's trended favorably as well.

Jonathan Arnold - Deutsche Bank - Analyst

But you're definitely selling, right?

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

We're definitely selling.

Operator

We'll now take our next question from Stephen Byrd with Morgan Stanley.

Stephen Byrd - Morgan Stanley - Analyst

Wanted to just check in with you on coal ash spend and recovery. I know this is a topic you've talked about in the past, but I just wanted to make sure I understood your latest thinking from here in terms of approach to recovery of spending and any additional thoughts you might have in terms of just strategy for addressing that spend.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Sure. Stephen, the forecast that we have in place at this point has about $1.3 billion of coal ash spend over the next several years, really targeted to the first four sites. And, we think that's a good planning assumption for now. We have requested deferral of those costs in South Carolina and we've received approval. And, we will be pursuing recovery of cost in South Carolina in connection with the case that we just filed.

For North Carolina, we intend to file a case in connection with the in-service date of certain plants. So we gave you an update on our timing on that and coal ash would be a part of that general rate case process. I'm pleased with what we've accomplished so far, both in terms of the progress we've made in basin closure. And, I believe the legislation that's in place today has also reduced any uncertainty, or a lot of the uncertainty, around the cost estimates and closure methods, which I also think is important.

Stephen Byrd - Morgan Stanley - Analyst

Okay, that's very helpful. And shifting to kind of the other side of the spectrum on solar, I guess two parts to this. One, we've been hearing a whole bunch of encouraging commentary from other utilities in terms of just the potential for increased solar growth. So, I was curious in terms of your take on that potential. And relatedly, in terms of your organic growth capabilities in terms of your team and being able to grow this business yourself rather than simply acquire other mature assets, if you could just speak to your capabilities. Thank you.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Stephen, we have had a separate dedicated team focused on renewables growth since 2007. We call it our commercial renewables team. So, we have about 3,000 megawatts of a combination of wind and solar. Some of it has been greenfield developed, some of it has been acquired. And we've been in the business of not only building, constructing, operating, but also acquiring assets for a long period of time. We continue to put capital to work in a disciplined way in that business. The returns are heavily impacted by tax incentives. And so insuring that we're delivering an appropriate return is always an area of focus in that business.

Over the last three years, we've turned greater attention to regulated renewables and have made a number of solar investments in the Carolinas. We announced one in Indiana and we've had a number in Florida as well. And, that team has delivered probably between 250 and 300 megawatts of owned renewables in all of our
jurisdictions. We believe that's going to be increasingly important as we go forward. So, there's been a lot of development in both areas of our business over the last several years. And, I believe we have a strong team to continue to pursue growth in those areas.

**Stephen Byrd - Morgan Stanley - Analyst**

Understood. And, Lynn, in terms of the potential for gross step change up in terms of greater solar growth just as the cost of solar continues to drop very rapidly, should we expect a step change? Or, do you see it as more of a gradual evolution where you're focused?

**Lynn Good - Duke Energy Corporation - Chairman, President & CEO**

Stephen, I would talk about it in a couple of ways. In the regulated area we have -- each jurisdiction has a slightly different profile. We have renewable standards in some. We have solar legislation in some. In Florida, we have a site plan that has 500 megawatts under development over the next 10 years. And we are constantly looking for what is the lowest cost resource that we can bring in that makes sense for customers and really use that as part of a planning assumption for our integrated resources. So we continue -- will see that continue to build. I wouldn't see it as a step change, necessarily, but continued growth consistent with what makes sense for customers.

On the commercial side, we have a combination of wind and solar. Our portfolio today is more heavily allocated to wind. And, we look for opportunities to bring assets into the portfolio that make sense, given our return expectations. So I would -- if you look at our capital plan, you see $500 million to $1 billion of annual spend looking for the right opportunities and that's a good planning assumption, again, to think about how we are adding renewables to our portfolio.

**Operator**

We'll now take our next question from Steve Fleishman with Wolfe Research.

**Steve Fleishman - Wolfe Research - Analyst**

Couple of questions related to international sale -- just the assumptions kind of on the edges. What was the debt level there at the end of the quarter? I had it last time around $650 million. Is that still about right?

**Lynn Good - Duke Energy Corporation - Chairman, President & CEO**

That's a good assumption.

**Steve Fleishman - Wolfe Research - Analyst**

Okay. And you still expect that you will not have to pay any taxes on a sale -- cash taxes?

**Lynn Good - Duke Energy Corporation - Chairman, President & CEO**

Because of the NOL position, Steve, it's pushed out.

**Steve Fleishman - Wolfe Research - Analyst**

Okay. And then is there anything you need to deal with in terms of overheads within the whole company that are being attributed there that might have to be placed to the rest of the company?
Steve Young - Duke Energy Corporation - EVP & CFO

No, I think we're in pretty good shape there. We have a Houston office that deals with the International business. And, so it's a bit more standalone than some of our other operations. So, I think we're well prepared to deal with that.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

And, Steve, I would add to that. In each country we run a Finance organization. There's a CFO, there are HR execs, there are legal support in each country. And, then we also have, as Steve indicated, a Houston office that serves as overall oversight. So, there are resources here at the corporate center that support International, but it's not to the extent that you might expect for a more domestic business.

Steve Fleishman - Wolfe Research - Analyst

Okay. And then unrelated question -- just I think, Steve, you mentioned something about commercial may be tracking a little bit below plan so far this year. But then I assume the utilities may be a little above. Could you just kind of clarify what you're saying there? What are -- if that's true, what are the key drivers on each below or above?

Steve Young - Duke Energy Corporation - EVP & CFO

Let me talk about some of our segments here. Commercial is running a bit below. We've had below normal wind, and that's pushed some of the earnings down there. We'll see what happens in the last half of the year. International had a large favorable tax item that we booked in Q1. Some of that will come back over the remainder of the year. But, that's been helpful to their results certainly for us. On the regulated side, we started out the year with mild weather and storms and some weak weather-normal volumes. We've done a great job in the second quarter of coming back -- weather has picked up a bit in June and certainly in July. We'll see where that goes through the third quarter.

Our O&M savings have been quite significant. Year-to-date $0.10 of savings that's been offset by about $0.06 of storm costs, but still some very strong year-to-date O&M savings that help us there. We've gotten good top-line revenue growth from energy efficiency riders and some infrastructure riders in the Midwest that has helped and continues there. We'll see how weather-normal load picks up in the second half. We're optimistic about the residential side of things. So, there's ups and downs in the various segments but we feel good about where we're headed for the rest of the year.

Operator

We'll move next to Julien Dumoulin-Smith with UBS.

Julien Dumoulin-Smith - UBS - Analyst

I wanted to follow up here on the commercial renewables, if you will. What is a good rule of thumb when you're thinking about wind or solar as you build those out and make year-over-year comparison? I know that you've had these pressures, but what are the rules of thumb? What is 100 megawatts, what's a gigawatt equal on an EPS basis? Again, you've obviously got the one-time ITC element here but just kind of an ongoing basis.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Julien, that's an interesting metric. The way we look at these projects is overall return over the life of the project with an expectation that the return has to clear hurdle rates around cost of capital and other things. So, we don't look at it as a specific metric of revenue or EBIT per megawatt hour, whether it's wind or solar. The profile, as you indicated, is different. So, the ITC impact of solar for the commercial can have a more heavily weighted near-term impact. Wind comes in over the 10-year PTC period.

What's influencing results for us in the first half is just the wind not blowing as much. So, we had relatively weaker wind in the quarter relative to plan. But, it's really consistent with what we saw last year with weaker wind, so not much of a year-over-year delta. Hopefully that clarifies.
Julien Dumoulin-Smith  - UBS - Analyst

Yes, absolutely. And then if you can expand on your strategic vision for the company. Obviously, we've seen other peers in the Southeast look at midstream a lot more closely. Obviously, you guys have more of a history. Can you give us your latest thinking on the trajectory? Is gas utility it or are you going to go further?

Lynn Good  - Duke Energy Corporation - Chairman, President & CEO

Julien, if you look at the investments we've made over the last three years, we have been turning more attention to gas infrastructure. And, that is really building on the transition in our generation portfolio toward more natural gas. So, if you go back to 2008, 2009, 2010, the Carolinas companies had very little generation coming from natural gas. That, today, is in the range of 25% to 30% of our energy is coming from natural gas. So, we made an investment in the Atlantic Coast pipeline, $2 billion investment, to bring more infrastructure into the state to provide infrastructure for further development of generation and also services to customers. We made an investment in Sabal Trail, which is important to Florida, which is already a very gas heavy area. And, then we added Piedmont, which is the interstate pipeline in the Carolinas, which we believe has great growth opportunity, not only for the customers they serve, but for increasing power generation.

So, we believe that gas infrastructure fits with Duke. The regulated returns, and the cash flows in support of our dividend are important. And, we will look for ways to continue to add to that portfolio as we go forward. At the same, as you know, we are also adding to our electric business with grid investments, renewables, and gas generation. And we'll continue with those investments as well -- always looking for ways we can add additional value to customers and to our investors.

Julien Dumoulin-Smith  - UBS - Analyst

Great. Thank you. And a quick clarification on a prior question. When you were talking about recovery mechanism for coal ash and the timeline in turn for rate cases, can you elaborate a little bit on your confidence of the 4% to 6% and when that's going to materialize as it relates to the latest clarity in coal ash recovery and, in turn, the clarity that you're now getting for your rate case timeline?

Lynn Good  - Duke Energy Corporation - Chairman, President & CEO

Julien, we are on track for 4% to 6% as we've talked about, really over this year. The rate cases will be more in the back half of the five year period, so, you should be thinking about greater contribution in 2018 and 2019 than in 2017, as an example. I think what the coal ash legislation does is it provides more certainty on our larger sites on the methods that we can use to close. And therefore, the overall cost and impact customers will be lower over the 10 to 15 year period that we pursue closure of these basins. So, I think it's all fitting together in what we have shared with you as our approach to delivering the 4% to 6% over the five-year period.

Operator

We'll now take our next question from Shar Pourreza with Guggenheim Partners.

Shar Pourreza  - Guggenheim Partners - Analyst

So most of the questions were answered -- just real quick on Atlantic Coast pipeline. I think that it's obviously now fully subscribed. So, is there a viewpoint on when and if you would look to up-size it to around two BCFs on laterals and compressors?

Lynn Good  - Duke Energy Corporation - Chairman, President & CEO

You know, Shar, we need to get through the FERC process for the existing investment of the pipeline. We expect to receive a scheduling order soon and anticipate the FERC order in 2017. So, I think discussions about the future around that pipeline will be better served in 2017, 2018 as we continue to progress the existing project.
Shar Pourreza - Guggenheim Partners - Analyst

Got it. And then just lastly on the solar, as we sort of think about your pipeline and your backlog and installations, how should we sort of think about the solar versus at the regulated utility, regulated rates or at the commercial business as you look to do more solar.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

So at this point in the regulated business, Shar, it's almost all solar. You should think about the Carolinas renewables investments as being solar investments. We have one wind investment in Indiana and there could be potential for more wind in the Midwest. But, I would think about our regulated potential as being primarily a solar potential.

As we think about commercial, we look at both. And, in fact, this year we're going to install more megawatts of wind than solar, just based on the opportunistic nature of what we've developed, the returns we've delivered and what we believe to be the highest quality projects. So, we'll be more opportunistic in the commercial business looking at a complement of wind and solar. We like the profile of PTC. So, there might be a slight bias toward wind. But, in our regulated business, as I said, solar will be the predominant investment type.

Shar Pourreza - Guggenheim Partners - Analyst

Got it. And then do you expect that mix between wind and solar commercial to potentially invert as the PTCs roll off?

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

We always look at that, Shar, and what makes the most sense for the business --where do we have the greatest return potential? We are heavily weighted to wind. We've probably put more attention to solar in 2014 and 2015, and so we continue to look at a mix.

Operator

We'll now take our next question from Michael Lapides with Goldman Sachs.

Michael Lapides - Goldman Sachs - Analyst

Hi, guys. Can you just talk about pension for a second? Just trying to think about what your sensitivity is to changes in discount rates and interest rates, and how that may impact O&M and which jurisdictions do you get kind of more real-time recovery of that increased cost versus which ones where there's a little bit of lag?

Steve Young - Duke Energy Corporation - EVP & CFO

Sure, Michael. A sensitivity first. 25 bps on our discount rate is about $0.02 up or down on our pension expense. And, it's a similar sensitivity of 25 bps change on the return on the fund assets. A couple of things about our pension plan, it's fully funded, over 100% funded and it's a closed pension plan. And, we're in the process of de-risking it, so we aren't quite as volatile as maybe some folks might be regarding swings there. Most of our jurisdictions have that as part of cost-of-service in our service territory. So you update pension cost like you do other non-fuel O&M costs.

Michael Lapides - Goldman Sachs - Analyst

Got it. One other question -- a little bit of a change of topic but when you look at demand across your different service territories, the demand trends look very different near Southern service territories versus those in the Midwest. Can you talk a little bit about how having those very different kind of demand trajectories impacts how you might think about managing those different jurisdictions differently?
Sure, Michael. You certainly do see different characteristics across our service territories, which is one of the benefits of that type of diversity. When you look at the Midwest, you'll see less residential population growth than the Southeast. But you do see some very solid industrial growth. When you look over the past several years, we've seen a lot of the automotive and metals in the Midwest carry our growth during 2012 through 2015.

What we're seeing now is that the residential growth in the Southeast is picking up as some of our industrial growth has declined a bit. But, we have jurisdictional leadership that is very well attuned to the business climates in all of our jurisdictions -- and they do vary. Florida has little industrial and has a lot of residential. The Midwest has a lot of industrial so we're well in tune and manage all of those jurisdictions accordingly.

Michael, what I would add is each jurisdiction has its own business profile challenges and opportunities, as well as the public policies in each state can impact the way we think about our priorities. And, so I think about the Carolinas with the focus on renewable portfolio standards and the increased interest in solar in South Carolina. We are taking advantage of that interest and making investments in that way. In Indiana, it's been a jurisdiction that has very much been interested in infrastructure investment. The support for the grid investment of $1.4 billion is something that moved through the legislature and then we've been able to put a plan in front of the Indiana Commission that they've approved.

And so the point you're making about tailoring what we do, both in terms of regulatory strategy and legislative strategy to each state, is something that our jurisdictional teams are focused on. And, I think that's one of the strengths of our portfolio is we have the opportunity to take advantage of the interest in each state.

Got it. Thank you for that. One -- I guess one final, in the Carolinas in North Carolina, have you all quantified what the coal ash expected capital spending costs are for the next few years and then kind of what the total obligation or liability is longer term?

What we have disclosed, Michael, in our five-year plan, we had disclosed $1.3 billion of CapEx related to the four sites that we knew we were going to excavate. And then beyond that, we had disclosed we had between 700 million and $1 billion for some other sites that we had disclosed we were going to excavate. Some of that spend gets outside the five-year window. So, we'll update those numbers in February. Those are kind of the disclosures that we had. I don't know that they've changed dramatically. The overall ARO obligation on our books in North Carolina is about $4 billion. That hasn't changed a lot over the past several quarters.

We'll now take our next question from Brian Chin with Bank of America.

Just a general industry question. We've heard from a number of your peers that are investing in wind and solar that because of the improvement in technology and the economics of scale that PPA prices are now economical at lower and lower levels. Could you give just a general sense of what your commercial team is seeing with regards to PPA prices for wind and solar? And what's your general take on to what extent do you agree with that statement versus does the industry -- is the industry experiencing a little bit of a capital discipline issue here? Can you just comment on that generally? Thank you.

Brian, the prices are lower. PPA prices are declining. I think that reflects the improvement in the technology. And the comment that I would make, the economics are still largely driven by tax incentives and so, an important criteria in establishing returns is your ability to monetize those tax credits either through a tax equity structure or through your own profile. And so that's something that we look closely at. I think we've disclosed that we are in an NOL position. And so our appetite for immediate
monetization is limited. I think there are a variety of considerations as we look at additional investment and what discipline means for Duke Energy in the returns that we're trying to deliver with renewables.

Brian Chin - BofA Merrill Lynch - Analyst

And then one other question. You made it very clear at the beginning of the year that the National Methanol group was not part of the International sale effort. Can you comment on are there any conditions that might occur in the future that might prompt you to revisit that? And what is the investment case for owning National Methanol? I understand that you have a very complex relationship with the government of Saudi Arabia in terms of an ownership structure. But, from just purely an investment standpoint, what is the case for continuing to own that business?

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Brian, I'll maybe give you a little perspective on history on this. We had the opportunity to renegotiate the NMC contract in 2011 or 2012. Where we extended the life of the contract in exchange for a reduction in ownership because we were not going to put additional investment dollars into the joint venture. And, we ended up with a very attractive net present value on that investment where you get another 15 years or so of earnings with no additional capital investment. We thought that was the prudent thing to do because the value of selling it at that point of renegotiation was inferior to the extension profile.

At any point I guess we could enter into discussions with our partners about an exit, but I look at it today as being a very small investment that produces strong cash flows that we're able to bring in and use to support the dividend. And, in the scheme of all of Duke, it's relatively modest. We're talking about less than $100 million of net income. So, that's the history I would share with you and it's been a good contributor over time, as you know.

Steve Young - Duke Energy Corporation - EVP & CFO

Yes, I would add that it's an investment on our books of less than $100 million that produces net income, cash dividend to the parent of, in some years, close to $100 million a year. It's lower than that. But, still very profitable at the lower levels. So, it's an equity investment that doesn't require a lot of management time or effort. Selling it has some challenges, so we'll hold on to it.

Brian Chin - BofA Merrill Lynch - Analyst

Great. Thank you. And best of luck as you complete the International asset sale.

Operator

We'll now take our next question from Michael Weinstein with Credit Suisse.

Michael Weinstein - Credit Suisse - Analyst

A lot of my questions have been answered but just to follow-up a little bit on coal ash, would you remind us how much has actually been spent to date so far versus the total plan? And is that the amount that you expect to file in your next North Carolina rate case?

Steve Young - Duke Energy Corporation - EVP & CFO

We've spent roughly $500 million to date and we'll be spending at accelerated clips as we go forward. So, we'll be determining what, based upon levels of prior spend, that will impact our filing criteria. Typically, we would not try to recover costs that have not yet been spent, so that's why you build up a spend pattern a little bit and then make recovery applications there.
And I think, Michael, it's important when we talk about $500 million, in the Carolinas we operate four utilities. So it's North Carolina, Duke Energy Carolinas, Duke Energy Progress, South Carolina, Duke Energy Carolina, Duke Energy Progress. So, that spend would be included in four different sets of rate cases as we go forward.

Right that makes sense. And I know that you've said earlier that the tax -- you don't expect any kind of gains tax on the sale of the Brazilian portfolio?

So, we're in an NOL position on our federal tax basis is what we were talking about. And, so cash taxes, if there are cash taxes to be paid, will be deferred into the future.

We would suspect that we would have a taxable gain on the sale, but the level of taxes recognized depends upon the sales price and so forth and have various tax mechanisms put in place. But, whatever tax liability we get from that will be deferred due to the NOL positioning.

Have you disclosed the tax basis?

No, we have not.

We'll now take our next question from Praful Mehta with Citigroup.

Just one question on -- we've talked a lot about your portfolio for commercial, natural gas -- putting the 4% to 6% growth rate that you have in context, how would you look at these different pieces of the business? As in what's driving -- what's kind of delivering higher growth in the 4% to 6%, what is lower? And as you look forward, how do you look at your portfolio? What do you look to grow? What do you think will deliver that stronger growth more post the four- to five-year time frame as well?

I would point back to the slide that we included in our February call that laid out the components of the growth. Certainly the utilities -- the regulated utilities -- are an important part of that. It's a combination of wholesale growth, investment growth and modest load growth. Our commercial business will contribute. Piedmont and the gas platform will contribute. We see Piedmont as growing at a faster rate than 4% to 6%, and the pipeline investment will be growing at a slightly faster rate. So I would refer you back to that slide. I think it's the best depiction of the details around how the 4% to 6% unfolds over the next five years.
Got it. And do you see that trend happening more past that five year trend as well? As in, do you see utility probably tapering off a little bit and that Piedmont picks up on that growth over time?

**Lynn Good** - *Duke Energy Corporation - Chairman, President & CEO*

I think we continue to look for ways that we can deliver investments for customers in our electric business. The one thing I would point out, if you look at the profile of Duke over the last 5 to 10 years, our growth has been more heavily weighted toward generation, which means we continue to have a lot of potential in distribution, grid, transmission and customer, that we'll continue to find opportunities to put capital to work over the next five years. But, I believe that trend will continue into the future. Renewables are another area that I think will continue beyond the five-year period.

**Steve Young** - *Duke Energy Corporation - EVP & CFO*

I would add that we see our regulated rate base growing at 5% over our five-year timeframe. And ultimately, that's a way to think about an earnings base. Now the timing can vary depending on rate case timing, but that's the earnings based growth we see.

**Operator**

We'll now take our next question from Ali Agha from SunTrust.

**Ali Agha** - *SunTrust Robinson Humphrey - Analyst*

First question -- just so that we don't double count these numbers, can you just remind us in the base case scenario, how much cash had you assumed you would be taking out from International on a going forward basis?

**Lynn Good** - *Duke Energy Corporation - Chairman, President & CEO*

About $300 million a year.

**Steve Young** - *Duke Energy Corporation - EVP & CFO*

That's correct. And, thus far we've taken back about $1.5 billion through the repatriation effort that we put together in late 2014.

**Ali Agha** - *SunTrust Robinson Humphrey - Analyst*

Okay. But that $300 million a year -- was that indefinite or was that over some period of years?

**Lynn Good** - *Duke Energy Corporation - Chairman, President & CEO*

So, Ali, you might remember we declared a $2.7 billion dividend. The $1.5 billion that Steve indicated has already moved against that dividend. So we had $1.2 billion left and I believe we were targeting to move that between now and 2021. Or something like that. What we had accomplished was a favorably structured transaction that gave us an opportunity to move $2.7 billion in an advantaged way. And we were going to move at $300 million a year against that between now and 2021.
Ali Agha - SunTrust Robinson Humphrey - Analyst

Got it. And just to be clear, Lynn -- correct me if I'm wrong -- so when we think about the proceeds that you'll get from the International sale, it's the cash that's about $1.2 billion that we should think of as incremental cash that you would not have counted on in your base case original plan.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

Certainly accelerated -- an accelerated $1.2 billion.

Steve Young - Duke Energy Corporation - EVP & CFO

Right. It accelerates it and would be greater than $1.2 billion.

Ali Agha - SunTrust Robinson Humphrey - Analyst

Right, right. And then separately, with the write-off -- I know you alluded to that in your opening remarks -- what is the book value of those International assets now?

Steve Young - Duke Energy Corporation - EVP & CFO

They are in the neighborhood of $2.4 billion, $2.5 billion.

Ali Agha - SunTrust Robinson Humphrey - Analyst

Got it. Okay. And last question, the 4% to 6% growth longer term, can you remind us, the underlying load growth weather normalized, is that 0.5% if you assume that stays consistent over that period or just remind us what you assume there?

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

0.5%. You have a good memory.

Operator

It appears there are no further questions at this time. I'd like to turn the conference over to Ms. Good for any additional or closing remarks.

Lynn Good - Duke Energy Corporation - Chairman, President & CEO

I want to thank you all for your interest in investment in Duke Energy. We look forward to continuing to provide updates on all of these matters as we go forward. And, of course, the IR team is available today for any follow-up questions. So, thanks again.