Market Cap: \$9.8B Cash & Equivalents: \$2.4B Total Debt: \$19.6B Enterprise Value: \$28.8B Price: \$14.60 2019 P/E: 11.2x 2019 EV/EBITDA: 7.6x 2019 Div Yield: 3.8%



Participants

Tom O'Flynn, EVP and CFO of AES Corp (AES)

Nate Abercrombie, The Stock Podcast

Interview Transcript

Nate: Tom, thank you so very much for coming onto the IWTB podcast. It's going to be a pleasure talking to you and

learning more about AES.

Tom: Great, Nate. Happy to join.

Nate: Well, it's great to have you. I start out all these interviews with just the background of the person who's being

interviewed, so if you wouldn't mind, I'd really like to hear your background and how you eventually became

CFO of AES Corporation.

Tom: Sure. I guess the elevator speech is I've been in the energy/power business for a little over 30 years. I started

15 years as an investment banker in New York City, one of the major firms working with utilities, IPPs, some midstream companies, and then I was CFO of PSEG from 2001 to 2009. Downshifted a little bit, worked with Blackstone as a senior advisor in their private equity group from I guess '9 to '11, and then joined here in the fall of 2012 as CFO. It was an exciting time to join, our CEO Andres Gluski had just stepped into his chair in the fall of 2011. He was making a lot of changes to the company, so it was an exciting time to join him a year later.

So, that'll have been about six years.

Nate: Yeah, and so as I understand it, 2011 was kind of a transition year for AES and I'd love to hear more about that

but before we get into that, just a brief history if you could provide one for AES, would be really helpful.

Tom: Sure. So, AES was founded in 1981. We were really a leader among IPPs, benefiting from the deregulation and

privatization of the US industry, and then we took those lessons and core competencies and went overseas. I think we have a unique business model. We focus on non-recourse financing, long-term contracts, clearly important things today. Historically, we were willing to go into a broad number of markets around the world. I think the pivot that Andres made in the fall of '11 was really to make it a more critical assessment of various markets, evaluate where we had a competitive advantage, where we thought we had been treated fairly in the

past, and try to focus ourselves in more markets. We've been on that path for a number of years. Essentially,

put more chips on fewer spots.

Nate: What was it, 2011, when the CEO change and eventually the CFO change occurred that, as I understand it, AES had a very altruistic goal of going into developing nations and providing people that didn't have electricity

previously with electricity. I guess from more of a returns perspective, there was some pushback from shareholders, but the company really tried hard to just provide services and a commodity to people that

previously didn't have it. Is that correct?

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Tom: That's fair, and the company was founded by a couple of very admirable people, and there's a lot of people that worked on globalizing electricity and bringing power to people in many markets, and many markets where people had not had power before. So, that was all very admirable. I think the thing that we've tried to do since then is to look at our shareholder base and think about where we can accomplish many of those objectives, but also with the lens of allocation of capital to places that make sense for our shareholders and other stakeholders.

Tom: Over the last six years, we have exited some more challenging markets. We have exited the African markets, we were in three countries at the time. We have exited some other places, Turkey, Ukraine, some other markets that were challenging at the time have obviously become more challenging since then. We still have many dedicated people who are still very focused on the mission of bringing safe, reliable, affordable electricity to our markets. That said, as I said, we want to focus on fewer markets, places that make sense for us and also make sense to our shareholders and stakeholders.

Nate: Yeah, yeah. I didn't realize you were in Turkey and yeah, it's a good thing you're not in there now with all the inflation.

Tom: Yeah, I think Turkey was one of the first ones. I joined in the fall of '12, and I think we announced our sale of Turkey three or four months later.

Nate: Oh, wow.

Tom: We'd been fortunate. We pride ourselves of having good, thoughtful boots on the ground. Many of our businesses have separate advisory boards, sometimes they're actual board of directors for our public companies. Sometimes they're less structured, but very well plugged in and outspoken advisory boards. So in those places, we would use those people to try to think ahead. Let's say Turkey and Ukraine are a couple places where we thought ahead and were able to get out at reasonable prices before things got more challenging.

Nate: So, could you describe the AES asset portfolio today, and just which countries you're in and just the proportion of earnings from either the different segments that you'd like to talk about, or on a geographic basis?

Tom: Sure. A big picture, our assets under management are about 33 billion, revenue's about 11 billion. We've got about 32 gigawatts of generation and six electric utilities. From a standpoint of percentage contribution, the US and our utilities is about 30%, South America is about 30%, what we call MCAC or Mexico, Central America, and Caribbean, is about 20%. These are big picture round numbers, and Eurasia is about 20%. Over time, the Eurasia business has become smaller, but we continue to see good growth opportunities and we're making meaningful investments in the US and throughout the Americas, South America and our MCAC region.

Nate: How many different countries do you operate in?

Tom: 15 at this time and five, six years ago we were about 30. So, we've come in half and our top 90% is now about eight countries. So we're much more focused. As I said, more chips on fewer squares.

Nate: Yeah, and is that because those, call it commercial environments, who are just much more attractive from AES's perspective, and do you just see yourself focusing on those countries going forward?

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Tom: I think it's a question of those countries being attractive, we think that there's good economic, political, and structural stability. Our markets outside the US have a high or top line megawatt hour usage growth of 3 to 5%, which when compare to the US it's about flat. We also feel that we've got a kind of advantage or leg up in those markets to try to keep one step ahead of our competition.

Nate: Yeah, and why is electric demand growing in those regions? Is it just because some of the devices that we use here in the United States, or were you increasingly using and seeing in new build construction are more efficient, or is it just because there's higher population growth? What are the dynamics there?

Tom: I think it's a little bit of all of those. I think in some countries we do have some good top-line economic growth, maybe Panama would jump up the most. The Panama market is growing very well. The new canal has been operating now well over a year, so that economy as a whole is growing very strongly, but also just the usage per consumer. Megawatt hours or gigawatt hours used for each consumer would be growing just as wallet grows, as well as economies and individual consumption patterns modernize. That certainly contributes to growth. That would compare to the US that's already got quite high consumption. In fact, the US was seeing energy conservation and some other things bring consumption down for a consumer in many cases.

Nate: Yeah, yeah, and what sorts of generation assets do you focus on? Is it all of the above, is it nuclear, is it natural gas, renewables? Could you just describe the asset mix?

Tom: Sure. Historically, we were quite focused on large fossil fuels so coal, gas, and hydro. We've had certainly our share of solar and wind, but going forward we expect renewables which is really solar, and wind, and battery storage to be probably 80% of our investment capital going forward. That said, we still believe that they'll be efficient gas, will be an important part of the energy mix especially when you think there needs to be 24/7 power available, and we see natural gas to be taking that role, so we do have two large construction projects going on. One in California, a well over \$2 billion dollar project for new gas, new Quick Start gas a little bit south of Los Angeles, and then we also have a large project that we just commissioned that we're very excited about in Panama that's a combination of gas and importing liquified natural gas to Panama.

Nate: Yeah, that's one of the things that I think is really interesting about your business, and when people think about here in the United States when people think about natural gas demand or LNG demand internationally, you have a company that is part of that equation in the sense that you are involved in, well, I'd be very curious to hear just how the development process works and whether or not you take a stake in regasification terminals but you participate in, at the very least, as an offtaker when these regasification terminals are built in places like Latin America and yeah, I would really like to hear just your involvement in those terminals.

Tom: Sure, and I think one thing that might differ us from some other players is that we really try to start at the market, looking at markets that we've been in, and try to think what make sense for the market going forward, what's the most efficient, cost effective, reliable, safe type of generation that can come into that market. So, in some cases it may be gas. In some cases it may be wind, it may be solar, it may be battery storage, it may be pieces of all of the above. I wouldn't say that we're not doing any new coal. We are completing a coal plant in India in the next couple of months, but we said about two years ago that we did not expect to do any new coal. Part of that is environmental, but part of that is also just the cost equation for gas and renewables has come down much more so that we really see that being the exclusive focus for us in the new world.

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Tom: In terms of LNG, we've been in the Dominican Republic for about 15 years with a large liquified natural gas import terminal. We have a combined cycle co-located with it that we call Andres, that tells how we're very efficiently and cost effectively into the Dominican Republic grid. We've expanded the use of that LNG import terminal and re-gas facility to another facility that we own, and we're actively working to expand the usage of that terminal including building a pipeline out to some power plants throughout the resort area, the Punta Cana area, essentially try to bring LNG and expand the use of LNG in the Dominican Republic. Often we're displacing older facilities that are burning diesel or number six fuel oil, which is obviously environmentally very problematic as well as very costly, especially with \$80 dollar oil.

Tom: Well, it's good for us but it's very good for the Dominican Republic. In any given year we saved them hundreds of millions of dollars, or saved the customers more, more importantly, hundreds of millions of dollars. It is the only LNG importation facility in the Dominican Republic. As you can imagine, the economic logic is largely to have one, try to maximize the usage of it before a second one would be built. So, we've taken that whole program, all those lessons learned, and we brought them to Panama when Panama was looking for new generation, but about two and a half, three years ago we proposed a combined LNG gas fired set up very much like the Dominican Republic. We were successful in winning that bid. It was a fairly challenging construction cycle in that it was fairly short, but we were confident we could do it. We actually have a number of people from our Dominican Republic facility managing that construction, and we inaugurated it about six, eight weeks ago in a very nice ceremony with high level US people, president of Panama, and really who's who of the region, so we're very pleased about it. In both those cases, I think the foundation is to bring LNG to a growing market that would A, provide new power, but B, also displace number six fuel oil and diesel, and some of this is in power generation but we're also displacing those in some of the commercial and industrial markets. So, the LNG in the Dominican Republic, we do work with some local distributing companies to make it into CNG, and that basically goes and competes against propane or diesel for some smaller scale industrial processes. We do expect to do the same in Panama. So, we're excited about those two opportunities. We've also got a joint venture with a large global LNG trader marketing provider, Total, and we would look to sell smaller shipments of LNG around the Caribbean to some smaller markets.

Nate: Yeah. So, do you own the regasification terminal in the Dominican Republic and Panama?

Tom: Yes, in both cases we own the re-gas and we own the power plants. All in, the Panama LNG, and re-gas, and power plant was about a billion dollars. In many cases, we work with partners. So in Panama, we're 50/50 with a local partner, a multigroup, very well known, excellent partner. So we work with them on this LNG combined facility. The Dominican Republic, we have partners about 10% of our overall Dominican Republic business. Well, it's a different structure but it's the same concept. We have some local partners there, in that case it's so small it's about 10% of the business.

Nate: Yeah, and are you the sole off-taker or do you also deliver gas to other commercial customers or other companies?

Tom: We're the sole operator, so we would look to those closing consumers that, maybe, are power plants that didn't have off-takers. In all our cases we would have long term power contracts from the power plants that would cover the cost of the gas, the re-gas, and the operations of the power facility. As I said, in the Dominican Republic we have the smaller distributing companies that come and take gas, and they would sell those to commercial and industrial customers in the Dominican Republic.

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Nate: I see, okay.

Tom: So, it's a broader network where let's say the command center, we're the operator and we distribute all of it, but we distribute across an increasingly broad network of customers. In Panama, the really exciting thing would be to sell to ships coming through the Panama Canal. Our LNG facility is right at the end of the Panama Canal, so our facility is well located at the end of the Panama Canal. There's often a bit of a backlog at the Panama Canal, so in simple terms I think of it as you stop and you get a cup of coffee and gas up, ours is a great location to gas up with some LNG, and so that's a market that we think could really have big potential for our facility.

Nate: Yeah, I've been trying to get one of the refiners on the podcast to talk about IMO 2020, which as I understand it, has pretty significant implications for the shipping industry and I would imagine that you guys might be pretty optimistic about what those changes mean down the road.

Tom: That's exactly right, and as we scoped out the Panama facility, we saw that it's an upside. We found our base case, but it's an upside, and it could be pretty meaningful as we structured and consistent with how we structured the overall contracts and financial picture, the contract we have for the power plant would cover the capital cost and operating cost of that power plant. It would also cover and provide a reasonable return on the LNG facility, that said it's only using about 30% of the LNG facility, so we've got about 70% of the LNG facility available that we see for upside, and certainly the upside could be additional power plants in Panama, conversion of some older power plants, could include some of the shipments around Panama to commercial and industrial customers, similar to what we're doing in the Dominican Republic, and then the really big mother lode, if you will, would be the bunkering business.

Nate: Yeah, wow. No, that's interesting. That's good to know. So, working in so many different international markets, things always change, and politics change, and the commercial environment could change. I'm just curious whether or not there are things that you're concerned about in the markets you're in, and if you wouldn't mind, you highlighted the LNG opportunity, but also highlight some of the things that you're excited about in some of the markets that you're in.

Tom: Sure. Trying to be ahead of the curve is core to our business from the political, economic standpoint but also understanding the power markets. The power markets are changing quite dramatically, especially as some of the new entrance renewables come in and come in at some very attractive cost numbers that can change some of the competitive equations. I think the thing that we're really excited about as we focus our business has been a high level. We think that we're meaningfully improving our risk profile. We've talked about how we simplified our portfolio. That helped us to reduce some of our complexity and our sensitivities to commodities, oil, and foreign exchange has dramatically gone down. When I started six years ago, I think about 40% of our earnings came through foreign currencies. Now it's about 15%. That's a very meaningful move as you might imagine. We also focused on improving our parent credit rating, some of that is paying down debt, but also much of that is just reducing the volatility of the portfolio. So, we're now a BB+ by all three of the agencies, and we're targeting to be investment grade rated by 2020. Part of that is to have a better cost of debt, more flexibility, perhaps longer tenor on some of our debt, but to be honest we're trying to regrade our equity and we think as we de-risk the equity, still maintaining some growth potential, we think that'll get us better multiples, lower dividend yield, higher PE, what have you.

Tom: Well, it also is part of that and part of the de-risking, we're extending the average contract life. Last year we were about seven years average contract life. Today we're about eight years and as we look forward to 2020,

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we'll be about 10 years. So, that's important, and generally as we build new facilities, as we invest capital, most of these would come with long term power purchase agreements where your prices are known from 15 to 25 years. So, that's exciting in that that allows us to invest capital, make good returns, and maintain stability. I think the one thing we're quite excited about is our renewable growth. As we've talked about our solar and wind businesses and also our energy storage businesses are growing quite well, year to date we find about 1.5 gigawatts of long term power purchase agreements. The biggest piece of those is in the United States, but well over a year ago we acquired a company based in Salt Lake called SPower, and they're doing extremely well. They're really hitting the cover off the ball, if you will. We also do a smaller distributed energy business that does solar in Boulder, Colorado. They're doing very well. We're also growing renewables in Mexico, in Brazil, and at opportunities in Chile, Argentina, and Columbia. So, the pivot towards renewables is quite attractive. As a large global company, we're really focusing on leveraging scale, purchasing power, know how to be continually ahead of the curve and hopefully a little bit ahead of our competition. So, those are some things that we're very excited about. We're also excited about our energy storage business. We think energy storage will be an increasingly important part of the energy matrix, being that this year we formed a 50/50 joint venture with Siemens where we each put our energy storage businesses and then combined 50/50 business called Fluence. We're the largest owner of energy storage in the world and see that as a major growth opportunity both for our investment in Fluence with Siemens and also we continue to install and invest in energy storage from an AES balance sheet perspective.

Nate: That's great. I would like to hear a little bit more about that JV, but are there any, I don't know if you want to call it political risk or just international commercial risks that you're concerned about? If there are any concerns, especially given leadership in the United States and some of the rhetoric that's come out of Washington relative to just geopolitics and I'm just curious if there's anything that you're keeping your eye on.

Tom: Yeah, a simple answer is yes. That's part of the business whether you're in calm times or whether you're in choppy waters or something with more chop that we may be in now. Clearly in the US, we're focused on the US relationships with other countries. I think we continue to maintain a strong presence. We really lead our businesses with boots on the ground, so in the various countries we're known by the local people, and so that's the banner that we fly. It's fair that there's some more choppiness with the US ownership piece, but we're managing through it. We do work it, so for instance it's UN Week this week an we've got certainly a number of people up in New York meeting with senior delegations, presidents, it's actually a great opportunity for us to fan out in some very senior meetings, and we continue to have those touches. We have to keep in mind, we've been in some of our markets for 15 or 20 years and hopefully that's, as we talked about things, and we make investments for any assets that are at least 20 years and in some cases 40 to 60.

Tom: We have to through cycles, and we hope that other people do the same.

Nate: Yeah, yeah.

Tom: In terms of our markets, yeah, there's ebbs and flows. In general, most of our markets are doing well. The one place that would warrant some attention is Argentina. We're very supportive of Macri changes, obviously had a number of challenges that were left on his desk when he arrived a couple years ago. Actually a year ago, I had the pleasure to have a one on one with him that was fascinating, extremely credible, honest, talented, transparent person. I was extremely impressed. So, that is a market that we're looking at. I'd say we're pleased that President Macri dollarized the energy market about a year and a half ago, so even though the peso has devalued, all of what we're paid for is in dollars. The other issue you might say, well then can consumers

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continue to afford energy? We'd say that energy is extremely cheap relative to the other markets down there. Energy is cheap in Argentina, so we think it's affordable, we think the government is very committed to the changes that they're doing. They have had a couple of bumps in the road.

Tom: My understanding is that they're continuing to work in a very constructive way with the IMF, so we think they'll get through it, but that's probably the market that we look at the most right now.

Nate: Yeah, it's interesting. So, you mentioned renewables and I would be really interested to hear just a little bit more about this JV that you have with Siemens, and just given the fact that you are the largest owner of storage across the globe and you have a joint venture with a great manufacturer of storage products, would love to hear more about just this JV might mean for AES.

Tom: We're very optimistic about energy storage. I'd say from an AES perspective, we've been doing battery storage for about 10 years. We started in Chile, brought it to the US, but we're now in about six or seven different markets, this is battery storage, that we own ourselves. We use it for different purposes. We tend to be market focused, not product focused. So, we started in Chile with backup power. We use it for ancillary in the US, and more and more now we're using it to extend the daily duration of renewables, especially solar plus wind. Basically shifting lunch time, solar, to dinner or the evening. We're the largest owner of storage and this is at AES. We own almost 300 megawatts of battery storage. We've got a couple large facilities going in. One is 100 megawatt, four hour storage and it'll be going in in California. This is part of the \$2 billion dollar project I mentioned earlier. That'll go live in the fall of 2020, and then we've also got two projects about 15 megawatts total, about 30 megawatts of five hour storage, so 150 megawatt average of storage, that are going online. One's under construction, one's about to be under construction in Hawaii, the island of Hawaii. Those will both be sold to KIUC, and we think that combination of solar plus storage is very compelling, especially a place like Hawaii that's trying to be 100 renewable by 2040. It's really the only way to do it.

Nate: Yeah.

Tom: It's very exciting. So, we've taken all that experience, know how, commitment, and we thought we could scale it better through a joint venture. I think the Siemens marriage is a great one if you think about our background. We're owner-operator developed, we know the markets very well, Siemens is obviously large industrial provider, process developer. They're in 150 markets. They've got real boots on the ground sales forces, so we thought it was a great combination. The team is doing well. Since May, we've signed about 80 megawatts of PPAs, and we've got a large global presence that we're building. They work across the value chain, so they work in the utilities sector. They have a product called SunFlex that would do the solar storage that we're doing in Hawaii, and then the Siemens brings a commercial and industrial piece of this that allows us to have products across six or seven different market segments.

Tom: It's a combined team. Some AES people, some Siemens people, so we're excited.

Nate: Yeah, no it seems very exciting. So, I'm very curious to hear your perspective, or at least how you would frame the AES business model and how that compares to, call it the independent power producers here in the United States who have conventional, some renewables, maybe some demand response, maybe some other generation assets that they have some long term contracts for some of their assets, but they're overwhelmingly exposed to commodity prices, but they try to offset that exposure with a retail component. AES, do you

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consider yourself an IPP? Are you a global IPP or do you consider yourself something different, like somewhere in between a regulated utility and a competitive power generator who has exposure to commodity prices?

Yeah, I'm not sure. There's probably different definitions these days of IPPS. I think our business model has the focus on developing, and building, and operating long term, contracted, regulated infrastructure projects. Similar to other players maybe, we use non-recourse financing. That's a good discipline for us, and also as we work on partners and different assets, it's a good way to put a box around different investment opportunities. One thing, I think we tend to be quite focused on the market and build up from there. So, some of our competitors would say they're the best at gas, or the best at wind, or the best at this. We tend to be quite market focused and say what pieces make the most sense for the value chain, the development of those markets? We can bring conventional fossil gas to the foreground. We can do hydro, though large central station hydro we don't see as being economical and [inaudible 00:32:38] project in Chile, but I think that's the last of the large hydro we'll do, but then we can think about gas/LNG, obviously wind, solar, battery storage.

Tom: In terms of our retail component, we do work a lot with commercial and industrials. We do that through most of our markets. We don't go downstream all the way to the residentials, and we don't see ourselves doing that. We did have a small business in Dayton, and we sold that business about two years ago. Just wasn't our thing, and once again just like we focused on markets, I think it's important for us to understand what we're good at, scale that, and try to be a leader in that and things that we don't have an edge in, perhaps residential retail. We decided to get out of that. That said, certainly our larger commercial, industrial, and utility relationships are extremely important for us. Many of our markets, especially some of our Latin American markets, we've had strong relationships with our commercial, industrials, and some corporates for many years and many of our power sales would be to a portfolio of companies.

Tom: Also, as we look at our renewable development here in the US, much of our recent success has been selling to corporates. Our SPower business in Salt Lake City has had a great year, and they've signed up a number of new companies including Microsoft, Apple, University of Richmond, a number of folks, and there's also a couple names that I'm not at liberty to mention at this point for confidentiality, but many of the leaders in our US economy and some of our global economies want to take the grading of their energy footprint, especially take that into their own hands, so those are important relationships that we're cultivating.

Nate: Yeah.

Tom: We tried to take commodity risk and upside or downside, we've tried to take that out of the equation as opposed to playing that cycle. Our focus is really longer term infrastructure type assets.

Nate: Yeah. Do you own and operate assets today that don't have long term contracts?

Tom: We do. We have about, maybe 15% of our portfolio that would not have long term contracts. There's a couple different pieces for that. Some of them are in markets where there aren't really long term contracts. We have a great hydro asset in Columbia called Chivor. That market is generally about enrolling in three year contracts, as is Brazil where we have a large hydro facility. That said, at least in Columbia there's meaningful discussion about looking to 10 year contracts, thinking that that would benefit both suppliers and consumers. We may actually see a positive transition to longer term contracts in Columbia over time. There's also a piece, in some of our cases we sell a portfolio of generation to a portfolio of customers, in that case you like to be a little bit

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long because as you know from the financial business, it's generally better to be a little bit long if you have a portfolio than risk being a little bit short, because you can really get beat up if you're a little bit short.

Tom: A little bit short could be because of weather issues, rainfall, perhaps peak demand being higher than you thought, or sometimes an operating issue in one of your facilities. So, depending upon the market, our sweet spot would be maybe about 10%, but that might be a little bit here a little bit there. It'd be 5 to 10% as a whole. The most ideal scenario is when you're building a new facility, and that facility is selling to a set of customers, and the contract is largely based on availability or production of that facility. That's the way most of our renewables are, and that's another reason why we like renewables.

Nate: Yeah.

Tom: Relatively low risk, pretty straight forward to build, short construction cycle, long contracts, and very minimal operating risk and volatility around the production curves.

Nate: Yeah. So, I guess because you said that, this is a good segue into what you want your portfolio to look three to five years out, but I know that you have outlined your capacity growth through 2022, and you're adding 11.8 gigawatts of generation which is really impressive given that that's more than 30% growth over that time period. Could you outline, maybe even longer term, what AES would like the portfolio to look like, and maybe not even just what you want it to look like, but what you think it will eventually end up looking like just given the changes in technology and customer demand?

Tom: Yeah, I think over time there'll be a natural transition to cleaner, greener, cheaper and I think wind and solar are leading those, supported by gas to fill in the 24/7 requirements, and also by storage. Coal, we think in some markets will continue to be an important part of the production mix for certainly the next decade if not longer. That said, I think coal will be used more as a peaking resource as opposed to a 24/7 resource. So we've worked hard in our coal plants, let's say in Chile, to increase the operational flexibility so they can be counterflow to the wind and the solar, but over time we'll have a natural evolution where you'll have gas as the 24/7 reliable back up, and wind, solar, storage carrying the bulk of the energy production load.

Nate: Yeah.

Tom: That's gonna happen over many years. It's gonna happen in different time sequences, because time sequences are based upon consumer wallet, resource availability, regulatory clarity, it allows capital to flow freely and confidently as well as other factors. So once again, we try to equip ourselves across the board with skills, tools, people to do that, understand the markets and then implement those changes accordingly, market by market.

Nate: Yeah, yeah. Thank you for that. Could you talk a little bit about your cost cutting program? AES outlined \$100 million dollars in cost cutting that you'll be able to, that you feel confident about, executing on. Could you talk about where those costs are coming out of the business and whether or not there's also opportunities to do more based on what you've seen so far?

Tom: Sure. Cost cuts have been a staple of our improvement, really since Andres stepped in. We've announced a couple different cost cutting programs over the years, but as we came into closing on 2017, let's say, we had achieved \$300 million dollars accumulatively in annual cost savings looking back from 2012 to 2017. We did in February announce a \$100 million dollar program that would really hit full run rate mid-year of '18 and carry

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through. That really is across the board. Some of it is top level TNA, some of it as at the operations level, some of it is trying to get more efficiency in the businesses, but I think it's a requirement of us to continually rethink how we work and be more efficient and more cost effective.

Tom: Yeah, yeah, I'd say as an example, we do some of our what we call strategic business units, a few years ago we had six of them, now we're really down to three. So once again, we try to flatten the organization, and as we've sold some assets try to reassess and change the way we work. We've also tried to take a hard look at where are we growing, and where we're growing is in the US, in Mexico and Central America, and in South America. Other places, especially Eurasia. We do think there's some modest growth opportunities in Vietnam, but outside that we're not spending a lot of time on growth, so that would say that we can structure those businesses really more as operating businesses, as opposed to growth businesses, which allows us to take out costs. They're still important businesses to us, but it's a little bit different if you run the businesses as operating businesses as opposed to trying to invest capital for the next five to ten years.

Nate: Yeah.

Tom: We continue to leverage scale, so our sourcing folks have done some very good things by combining some of our purchasing and sourcing from various vendors, so that we get some big wins there. Once again, really combining the things we do around the world to leverage them and bring about cost savings. The AES grew up as a highly decentralized company, and that was part of its culture. I think we've tried to maintain some autonomy of the boots on the ground. That's extremely important, but also have the matrix environment that allows us to leverage scale, scope, and some of those things are allowing some real cost savings.

Tom: So, our operating guys, especially in sourcing and combined operations, continue to find ways to improve efficiency and save money.

Nate: Yeah, so we talked about the growth in your portfolio over the next several years. Could you talk about what your capital needs are over that period? So, you've got 11.8 gigawatts that you plan on building, but near term you've got 5.7 gigawatts under construction. How are you funding this growth? Is it internally funded? Do you need to issue any equity? Typically how much leverage do you put on these projects?

Tom: Sure. Bottom line, it is internally funded. We think we have appropriate leverage. We're essentially using cashflow that we're generating in the businesses. We've got a little over \$4 billion dollars of cashflow that we're gonna generate through 2024, \$4.2 billion dollars. We expect to develop, own, operate about 2-3 GWs per year. As you think about how we fit together the financing for that two to three gigawatt, it's about two to three billion. In many cases, we have partners. Those partners can be anywhere from 25% to 50%. We also do non-recourse financing on these businesses. Sometimes it's by asset, sometimes it's by bundles of assets, and that can be anywhere from 60 to 80%. so net-net we expect about \$300 to \$400 million dollars a year of AES equity going into our goal projects. That's very consistent with our track record since I've been here over the last six years.

Tom: It's generally been in that \$300 to \$400 million dollar range. I think the major difference is that we expect it to be across smaller individual bites, renewables are just smaller businesses or smaller assets, but in totality it would be very similar to what we're doing, just more sequential as opposed to some of the large single station projects we've been doing. We're essentially looking to reinvest our capital into these businesses. We also continue to pay out a good dividend. We use about half of our parent free cashflow to pay out a dividend.

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We've got a dividend yield of around 4% these days, but the \$4.2 billion comes from internal cashflow from some asset sales, and then we parlay that into growth, into our dividend, and into some modest debt pay down, but we're largely there in terms of debt pay down targets.

Nate: Yeah. Do you have very many investors, current and potential, just folks that you speak to when you go on road shows that express any concern around the debt levels? I mean, you mentioned 60% to 80% debt financing for some of these projects, and having been in the wind industry, I understand that you have counter parties with really great credit ratings, that sign really long term contracts with a company like AES, whenever you're developing an asset, and so the credit risk isn't all that great. At least it doesn't seem all that great from my perspective because I was in the industry, but I'm just curious whether or not you have investors that have a hard time getting comfortable with the debt levels.

Tom: I think the investors should know us well, are comfortable, they'd like to see us improve our AES debt credit stats somewhat, but about 70% of the debt we have is non-recourse to AES. It's non-recourse either as an asset or a subsidiary or both. We might have a subsidiary that have non-recourse assets and we have a couple different layers. In general, as we finance a project or a business, we've got BBB BBB- kind of statistics. In the US we just did a \$500 million dollar deal at our SPower business. It was about 20, 22 years in term and the coupon was about 5%, so that gives you a sense, and it was rated BBB- by one of the agencies. So, that I think is very much bread and butter for the industry. It was behind some tax equity for some of the complicated US tax optimization strategies we pursue, but that's generally how we do things.

Tom: In other markets, we would have similar financial structures in a couple of markets aren't investment grade, but they would still have those similar characteristics. We didn't look up at AES, and there's certainly cases where our debt could be higher rated such as our US utilities, especially Indianapolis Power and Light we have A rated debt. As you look up at AES, we did have too much double leverage when Andres stepped in, and I came up a year or so later and I said we have about \$6.5B dollars of debt at the parent level, that was, to be honest, too much parent leverage, and we were BB- and it wasn't all so clear that the company had the objective to improve their parent level credit stats. Since that time, we've cut that down to about 3.8 billion, and as I said, we came out about a year and a half ago with a very strong commitment from Andres, from the board, that we wanted to continue to reduce debt, improve our cashflow generation from the businesses, so that we can have investment grade statistics by 2019 and 2020. I think that is resonating with investors.

Tom: And we certainly try to listen to investors as much as we can. Sometimes investors will look at some steps that we do from different perspectives, but this seems to be something that investors are very supportive of, especially as it comes along with not just improvement in the math, the numbers and coverage ratios, but really improvement in a focus on reducing risk, improving stability via improving the length of contracts. We do see a foreign currency risk. All those kind of things. This year has been a good year, knock wood, for our stock. Our year to date return is about 30% albeit off a disappointing 17 so you can argue we were at a low number, but we do think we're making some connections with investors.

Nate: Yeah, definitely. I'm just curious whether or not internally you guys have been keeping an eye of Elliott Management, just given the fact that their activist involvement with NRG and now they're involvement with Sempra essentially coming and having these companies, these management teams, simplify the story which includes selling off renewables, which have high levels of debt, and yeah basically cutting off a big part of their business that, I guess in Sempra's case, it's not that big of a part of their business, but in NRG's case it was a pretty significant chunk of their business and obviously the balance sheet of NRG is going to look a lot better

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going forward and Sempra's could look different as well going forward. I mean, have you guys just talked about what's been going on in the space relative to Elliott Management?

Tom: Yeah, we certainly follow those developments. Elliot's worked with Bluescape. I know John Wilder from one of my earlier lives in investment banking. I think a lot of him, it was a pleasure working with him when he was down in New Orleans a couple careers ago for him. I think it's incumbent upon managements and we certainly think this day to day, to do the best we can for our shareholders and our stakeholders that's in the businesses that we have, and thinking about different structural alternatives to bring more value to the business, because those are things that Andres, the board, takes very seriously. We do, on occasion, bring in outsiders. Investment bank consultants, we did not too long ago, to look at whether there is another way that we could run the business, reshuffle the deck, whatever you want to say, in a way that would create more shareholder value. So, we're very attuned and I think that that's just the way we gotta run our business on a day to day basis. Certainly the Elliott/Bluescape moves that have been quite successful, would be a very stark reminder that if we can't do it, someone else is gonna try to do it for us.

Tom: That's fair. As a public company, that's fair game. In terms of this advice and the board and try to get some serious thinking, I think we have a very good board, we're very pleased with Jeff Ubben from Valueact. Joined our board at the beginning of the year. We're very pleased he considers some of the things they've done at Valueact in that activist type of arena, though I think he's certainly been a more constructive or friendly activist in many cases. He launched a new fund called a Spring Fund. That is to really focus on sustainability, environmental productivity, and fit. We're very pleased to be in the Spring Fund, we're a relatively modest investment from Jeff but he's growing and he's obviously getting his arms around ourselves and the business.

Tom: That's a great example. Andres, to be honest, welcomed him into the business. He was looking for someone who was a seasoned investor to join the board. We had an issue as often the seasoned investors are conflicted, but I think Jeff is a great fit and what he likes about is the pace of change of our sustainability and our environmentally friendly moves. We are still carbon heavy in some of our footprints, but we're looking to do things that would have meaningful change, that's good for consumers and good for shareholders.

Nate: Yeah, are you guys part of the ESG, the indices, or is that something that you're looking at?

Tom: Tom, we're not part of the indexes, but we're certainly focused on some of the broader initiatives. We've joined some of the broader initiatives including the Taskforce on Climate-related Financial Disclosures. We would like to get into more of the indexes. I think some of the indexes are still forming. To be honest, he asked us are we an IPP, are we a utility? We really see ourselves as more of an infrastructure play. That parlance makes a lot of sense to some of the private investors, say the private investors who we work with say pension funds. I'm from Canada, so I'm biased to Canada, but we're partners with [inaudible 00:54:57] a very large player in Quebec. We're partners with Aimco, Alberta Investment Management. We think very similar to those folks, long term, stable, environmentally friendly infrastructure assets. Those are the kind of indexes, or groups, or tags that we'd like to be associated with.

Tom: It's been a little harder to find those in the public markets.

Nate: I've had this conversation with NRG Yield and Pattern Energy, and it's just surprising. I don't know if things have changed since then, but I remember the Bloomberg Terminal had Southern Company within its ESG index, and it didn't have Pattern. I just thought that was really shocking given the fact that, you know.

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Tom: Yeah, I think some of these indexes are still forming. We try to be as much a part of those discussions as we can, but I think they're still forming.

Nate: Yeah, yeah. So, could we move on to free cashflow and would you mind sharing? I would like to hear your views on a good range for AES's free cashflow. Once you build out, call it the 5.7 gigawatts or whatever reference point you want to think of, and I ask that question partly because some of the estimates that I see on FactSet show flat free cashflow for AES for the next two years. I was just curious if you could share what a good range could be.

Tom: Sure, so we think parent free cashflow is a big focus of the expectations that we give to the streets focus of financial compensation. So, it has grown meaningfully. It was around 500 a couple years ago. It was \$630M dollars last year. We have said that by 2020 we look at 17 to 20 all in. We think it's about at 8% to 10% average annual growth. We had said this year we think we'll be flat to a little bit up from last year. That's just due to a couple of one time things, but as we look from a trend standpoint, we think parent free cashflow is gonna continue to grow, and that's a big part of how we run the businesses. All our businesses are dividend payers. As we look to invest capital, everybody's got to be paying a dividend, every asset, every business has got to be paying a dividend shortly after they go commercial. That's just now a fundamental part of how we run the business, so if that's not the case, we're not going to invest. To be honest. That was not the case years ago. Pre-Andres, they may have looked and said, "Well, there's not a lot of near-term cash, but there'll be cash in five years, ten years." We just don't pursue those kind of opportunities anymore, so with that kind of foundation, that discipline and those management incentives, were comfortable that we will continue to grow and that then allows us to continue to improve our credit rating, have some modest debt pay down, and make meaningful investments into our subsidiaries of \$300 to \$400 million dollars a year.

Nate: Yeah, so maybe when I'm looking at the free cashflow number, what would the free cashflow profile look like if you weren't to include growth capital?

Tom: We tend to think about ourselves, we say on a unconsolidated basis. So for me, free cashflow ... so I sit here in Arlington and think about our businesses, I think about where the dividends that are being sent up from the businesses, because it's about \$1.2B, what's the cost at the parent level which would be some interest costs that are going down, GNA that are going down, and then what's left in parent cashflow. So, I think about it maybe different than the accountants who look and consolidate it. I used, coined long ago by somebody I worked with at the investment bank called Cigar Box Accounting. Just what's the cash you get, how do you use it, what do you got left? That's this 637 and growing that we talked about. That's how the agencies look at it, too. They basically look at subsidiary dividends as the parent free cashflow as opposed to more an accounting consolidation.

Tom: That's what's really gonna drive our business, drive our wallet. Folks who also say, "Do you have money to buy back stock?" That's certainly something we think about. Since Andres and I have been here, we bought back I think 16% of our stock, 1/6, about a billion and a half. So, it's a meaningful amount. We're certainly willing to pull that lever, showing a commitment to do that, it's certainly an arrow we've got in our quiver. We don't see it as part of our near term priorities, but we certainly keep a watch on it.

Nate: What would have to happen to make it one of your near term priorities?

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Tom: It's a couple things, I'd say. We do compare new investment opportunities to the valuation of our stock. We do it on a portfolio basis, so really two things. We'd have to think that the number and or attractiveness of our investment opportunities was going down, and perhaps that we had some sag in our stock price. We know

those are high level things.

Nate: Yeah.

Tom: Over the last couple years, we've got good investment opportunities, and we have thought that paying down debt, wanting to improve our credit profile, trying to regrade our equity is extremely important, and we think

that that generally resonates with prospective investors.

Nate: Yeah. How are you thinking about the rerating of the equity once you become investment grade? Do you think about things in terms of, well, regulated utilities, some of them pay, call it a two and a half percent dividend and they're growing at 7%, so maybe your stock could rerate to something to that level, or just curious how

you're thinking about it?

way that this industry gets valued.

Tom: I think the regulated utilities certainly have a low risk and strong rate based growth opportunities that would be a PE number that would be unreasonable for us to expect, let's say. I do think if you think of ourselves at a 10 to 11 PE to think about which year your focus is off of, versus they are in the high teens. I do think splitting the difference of something in the middle of that range is achievable. If you look at some of the companies that are most like us, some of the European utilities, the large ones, they would have PE multiples somewhere in the middle, kind of mid-teens. So I think those are reasonable numbers. As I said, we've had a good progress year to date in the market. We're moving up as we hit our numbers, continue to get confidence in the market, that we'll hit our growth numbers going forward. We de-risked the business. Some of the larger risks we have taken off the table or really minimized. I think we're on the right track. I'm not a fan of trying to predict market valuations [crosstalk 01:02:32] things that are challenging enough, as you well know, but I do think there's a pretty wide gulf and we think that there could be some meaningful improvements. We've done some work, and there is certainly a correlation between moving from the known investment grade, to investment grade, and price earnings or market multiples. I say price earnings because that seems to be the most straightforward

Nate: Yeah, that addresses part of my next question, just which valuation metrics you think are most important for your business. So, PE multiples are important. What are your thoughts on EV to EBITDA, free cashflow yield,

dividend yield. I imagine dividend yield is probably also important, but which ones do you-

Tom: I think dividend yield is quite important. I think the valuation of the check in the mail will continue to be important. We have looked at proportional cashflow, or free cashflow, and we found it hard for that to resonate. A part of it is the complexity of our businesses as some of our businesses are consolidated. We have partnership interests. We have non-recourse debt, so it's a little bit harder, but we've also had some issues in terms of really detailing it from a disclosures standpoint. So, frankly, we used a guide also to proportional free cashflow. We did not do it this year. We thought it was well worked and was valued or paid attention to by investors. So, I think it's really price earnings, earnings growth, dividend yield, I think those are the key pieces.

Nate: Yeah. You mentioned the growth story for AES. You talked about the dividend and you also talked about paying down debt, so I don't like to lump investment theses or stories into just one bucket, but would you consider

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AES' investment story being a growth story, shareholder return story, or a deleveraging story, or just all of the above?

Tom: Yeah, so I think it's all of the above. We think there's attractive growth with reasonable and decreasing risk. Certainly an attractive or compelling evaluation from an investors standpoint. We made improvements in our evaluation this year, but as management, we think there's still some ways to go.

Nate: Yeah, so what do you think the market is missing just relative to, again, we've made comparisons to the IPPs, we've made comparisons to regulated utilities, and your stock still screens cheap. What do you think the market misunderstands about your company?

Tom: I think the market may still be lagging on our decreasing risk profile, and that's fine. Certainly AES has looked back over five ten years, there's different issues that have come about, but we really think we've minimized those and once I think the market is giving us more appreciation for that, the market and the rating agencies. Our numbers have improved for rating agencies, but a big part of our ratings upgrades have been an improvement in business stability. So, I think the market is a little bit behind on that. I think the market also doesn't appreciate the value of the investments that we're putting into the ground in our renewables areas. In the US, we think we'll get 11% to 12% returns and on a risk adjusted basis is very attractive. Those are assets that we could sell down for a premium if we so desired, and we've got one example where we got that in process.

Tom: I think in our other markets where we see 3% to 5% top-line megawatt hour growth, the kind of platforms that we have with our assets, with our customer relationships and relationships throughout the fabric of the economies, we think we'll have some meaningful opportunities. A lot of those we're hard at work at. That's fine. It's one step at a time. I think the market is always gonna want to be shown that management can get it done. So once again, we think we've made some progress this year, but we still have some more ways to go such as more opportunities. Investors come in and I think investors can take a piece of AES that would have growing earnings as well as improving valuation, potentially on those earnings.

Nate: Yeah, yeah definitely. Well, thank you for that. I really do appreciate you coming onto the podcast and agreeing to an interview. It's been a pleasure.

Tom: Okay, thanks Nate. Happy to do it, and take care.

Nate: All right, bye bye.

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