

THOMSON REUTERS STREETEVENETS

EDITED TRANSCRIPT

BWXT - Q2 2019 BWX Technologies Inc Earnings Call

EVENT DATE/TIME: AUGUST 06, 2019 / 12:30PM GMT



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

CORPORATE PARTICIPANTS

David S. Black *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

Mark A. Kratz *BWX Technologies, Inc. - Director of IR*

Rex D. Geveden *BWX Technologies, Inc. - President, CEO & Director*

CONFERENCE CALL PARTICIPANTS

Carter Copeland *Melius Research LLC - Founding Partner, President and Research Analyst of Aerospace & Defense*

Joshua Ward Sullivan *Seaport Global Securities LLC, Research Division - Director & Senior Industrials Analyst*

Matthew Carl Akers *Barclays Bank PLC, Research Division - Research Analyst*

Michael Frank Ciarmoli *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

Peter J. Arment *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Peter John Skibitski *Alembic Global Advisors - Research Analyst*

Peter Kirk Lukas *CJS Securities, Inc. - Analyst*

Robert Michael Spingarn *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

Ronald Jay Epstein *BofA Merrill Lynch, Research Division - Industry Analyst*

Tate H. Sullivan *Maxim Group LLC, Research Division - Senior VP & Senior Industrials Analyst*

PRESENTATION**Operator**

Ladies and gentlemen, thank you for standing by, and welcome to BWX Technologies Inc. Second Quarter Earnings Conference Call. (Operator Instructions) I would now like to turn the call over to our host Mr. Mark Kratz, BWXT's Director of Investor Relations. Please go ahead.

Mark A. Kratz - BWX Technologies, Inc. - Director of IR

Thank you, Ben, and good morning, everyone. Welcome to BWXT's Second Quarter 2019 Earnings Call. Joining me today are Rex Geveden, President and CEO; and David Black, Senior Vice President and Chief Financial Officer.

On today's call, we will discuss certain matters that constitute forward-looking statements that involve risks and uncertainties, including those described in the safe harbor provisions found in yesterday's earnings release and our SEC filings. We will also provide non-GAAP financial measures, which are reconciled to GAAP measures and our quarterly materials. Copies of these documents, along with a replay of today's call, are available on the investors section of our website.

And with that, I will turn the call over to Rex.

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

Thank you, Mark, and good morning, everyone. Yesterday, we reported second quarter results with solid revenue and earnings per share growth of 7%. This reinforces our proven ability to deliver good business results on operational excellence as we execute against our robust -- robust backlog and look to future growth through a number of strategic initiatives. With about 55% of our earnings for 2019 still anticipated in the second half, we continue to focus on strategic priorities and operational execution to deliver the balance of the year and position the company for continued growth in future years. I will now provide a brief business update before handing the call over to David.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

In the Nuclear Operations Group, we are driving higher shop volumes across all platforms, including the new Columbia Class submarine and saw those efforts bear fruit in the second quarter through increased production tempo and the acceleration of some long lead material. We continue to aggressively hire qualified personnel for the multiyear production ramp and are making very good progress towards those goals.

We anticipate this growth trend to continue through the year, driving increased second half earnings, through higher volume and materials as we exit 2019. The NOG segment is also making progress on contract proposals for the accelerated Ford class carrier and a separate order for long lead materials. We anticipate wrapping up those negotiations in the second half of the year, which will provide additional visibility and backlog for the Nuclear Propulsion franchise platform.

This team is also performing well on missile tube repairs. We have completed all repairs on the Virginia Payload Module tubes and are about halfway through the total welding rework campaign.

Missile tube repair cost remain on track, and we expect to complete the bulk of repairs this year with the remainder of delivery obligations for the missile tube production, extending into 2021.

At this point, we have not received any incremental orders from missile tube continues production. As we've mentioned on prior calls, in the absence of any additional orders, we plan to reallocate most of that CapEx to support future growth in the core Navy business.

Lastly, national defense budget negotiations continue to reflect positive traction for key BWXT programs. About 2 weeks ago, the President and Congressional leaders announced an agreement on a 2-year top line budget, which eliminated the threat of sequestration and paves the way for timely approval of a government fiscal year 2020 appropriations bill this fall. Both Senate and House versions of the government fiscal year 2020 National Defense Authorization Act as well as the House Appropriations bill proposed funding for long lead procurement of nuclear propulsion equipment for a third Virginia class submarine in 2020.

In the Nuclear Power Group, the commercial power business is performing well. Refurbishment work continues to be a growth opportunity, however, some of that future growth will be moderated by completion of the China steam generator project. As we discussed on prior calls, our recurring service work is lighter this year due to cyclicity of the scheduled outages. Despite the foregoing, the team is highly focused on execution and has delivered superb operating margins year-to-date.

In the medical radioisotope business, we anticipate the introduction of 2 new products into the market in Q3, Indium-111 oxyquinoline and Germanium 68, which should give the base isotope business respectable incremental growth in to the coming year.

Importantly, in medical radioisotopes, we continued progress towards moly-99 commercialization. In the second quarter, we made significant strides on the final design of the manufacturing lines and are operating a full scale pilot plan in the Lynchburg advanced technology laboratory.

We have also begun facility modifications at our main plant in Ottawa, and placed long lead material orders from the moly-99 radio pharmaceutical line. We continue to project commercial readiness in the first quarter of 2021.

In the Nuclear Services group, a back half weighted year continues to be driven by timing of second half performance milestones across our joint ventures similar to last year.

Over the last quarter, some of the near-term opportunities have shifted out or were eliminated putting incremental pressure on operating income growth for that segment this year, which has resulted in lowering the NSG guidance to reflect our current view of 2019. And lastly, we are investing heavily in the business for future growth, while deploying excess capital to shareholders where appropriate. Year-to-date CapEx remains elevated, primarily supporting Navy growth, and we anticipate CapEx spending to increase in the second half of 2019 as we build out the moly-99 production line.

Let me now turn the call over to David to discuss segment results, guidance and other financial matters.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

Thanks, Rex. Starting with segment results. Nuclear Operations Group generated record revenue for the second quarter of \$358 million, up 7.9% year-over-year, driven by higher production volume and the acceleration of long lead material purchases.

Operating income for the quarter was \$75 million, up 12%, due to higher volume in the absence of missile tube charges we incurred in the second quarter of 2018. The Nuclear Power Group produced \$87 million of revenue in the second quarter, a 14% increase when compared to the second quarter last year, driven by an increase in refurbishment component work in the medical radioisotope acquisition, partially offset by the anticipated lower volume in recurring field service activity. Second quarter segment operating income nearly doubled versus the prior-year period to \$14.9 million, driven by higher volume in the commercial power business, including contract improvements as well as the medical radioisotope acquisition. Second quarter NPG operating margins were robust at 17.2%. And lastly, the Nuclear Services Group contributed operating income of \$1.8 million in the second quarter, down about \$1.7 million versus the second quarter of 2018.

Improved site performance was more than offset by higher bid and proposal activity and contract completions in 2018.

Moving now to total company results. As Rex mentioned, second quarter EPS was \$0.62, up 7% from the second quarter last year. Higher segment volume, solid operating margins and lower share count were partially offset by higher interest expense and lower pension income. The company's second quarter capital expenditures were \$31 million, bringing year-to-date CapEx to \$76 million, up 123% versus the half a point of 2018. We also continue to return capital to shareholders in the second quarter through \$16 million in dividend payments. This brings total year-to-date capital return to shareholders to \$53 million, inclusive of \$20 million in the share repurchases to offset dilution.

The Board of Directors continued the dividend trend by declaring a cash dividend of \$0.17 per share payable in the third quarter of 2019. The company generated \$65 million of cash from operations in the second quarter of 2019, up significantly versus the prior year period. This resulted in an (inaudible) balance of short-term investments, net of restricted cash of \$38 million at the end of June 2019. Our gross debt totaled \$879 million at the end of the second quarter 2019, including \$400 million in the senior notes, \$279 million in the term loans and \$200 million in borrowings under our revolving credit facility. We also had \$66 million in letters of credit, under our credit facility, and as a result, have a \$234 million of remaining availability.

Turning now to guidance. We are reiterating our 2019 guidance of non-GAAP earnings of about \$2.50 per share and consolidated revenue growth of about 6%.

Our EPS guidance continues to contemplate tailwinds from higher volume and reduced share count, while still expecting about \$0.20 of EPS headwind from increased interest and research and development expenses and lower non-cash sales pension income reported in other income.

We have updated a few components of our underlying guidance to reflect our performance to-date and the outlook for the remainder of the year. In the Nuclear Power Group, we now expect operating margins of about 14% for 2019 versus the prior year guidance of 13%. With 90% of our guidance either achieved to-date or in backlog, we remain confident in our revised guidance for this segment.

In the Nuclear Services Group, we are updating the operating income guidance to approximately \$20 million for 2019, down from our prior guidance of about \$25 million. We believe that one of the deal, the Hanford awards is moving to the right, pushing an anticipated award and associated income from the contract into 2020. In addition to DOE contracts, there were a couple of commercial opportunities that did not materialize, including the decision to close the U.S. nuclear plant on Three Mile Island, that was originally slated for service outage work.

We have slightly improved our guidance for corporate unallocated expense, which we now anticipate to be less than \$20 million based on focused cost management. All other components of 2019 guidance remain unchanged.

And lastly, we continue to reiterate our long-term non-GAAP EPS guidance of a low double-digit EPS CAGR over the 3- to 5-year period from our 2017 results. And with that, I'll ask the operator to open the line for questions.

AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Bob Labick with CJS Securities.

Peter Kirk Lukas - *CJS Securities, Inc. - Analyst*

It's Pete Lukas for Bob. I think you touched on -- I think you guys touched on it but how does the NOG pull-forward impact the cadence of earnings in 2H, was it more from Q3 or Q4? And also, the Columbia Class, it sounds like everything is proceeding on schedule there. Just want to touch on the cadence of that for 2020.

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, Pete, I'll take that. We kind of expect a sequential build up of earnings from the second -- from the first half into the second half, Q4 being heavily -- more heavily weighted in Q3 is the way we see that going. In terms of the Columbia production, we're doing very well with that. You can see that in our Q2 results, that was -- one of our 3 strategic priorities for the year was to ramp successfully on the new Columbia product line. And we've been able to hire successfully, we've been able to get that product line up and going. So we are quite optimistic about it.

Peter Kirk Lukas - *CJS Securities, Inc. - Analyst*

Okay. Great. Thanks. And I'll jump into the Nuclear Services Group. The bids you spoke about, were these new opportunities? And when will you know the outcome of those?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, there are 2 new opportunities at Hanford -- at the Hanford site, DOE opportunities related to clean up out there. One is called the Central Plateau Clean Up Contract and the other one is tank -- is a waste tank remediation contract. We -- both of those -- one of those likely be awarded this year, the other one likely into next year, and we're competing on both of those.

Peter Kirk Lukas - *CJS Securities, Inc. - Analyst*

And last one for me, Nuclear Power Group. Can you expand on the contract adjustments in the quarter? And just briefly touch on the quarter there?

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

The contract adjustments are just normal adjustments and improvements in contracting. One of those would have been the China steam generator projects, that would have helped the quarter quite a bit. Once again, that is complete and will not be in our future. So but those are normal finishing up the contracts and taking adjustments or improvements for those.

Operator

Our next question comes from Pete Skibitski with Alembic Global.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Peter John Skibitski - *Alembic Global Advisors - Research Analyst*

Just to drill down more on NOG in the second quarter. So was Columbia the biggest driver to growth? And -- I'm just wondering, at what point you guys are starting to ramp on Virginia Block V as well? And will both of those programs kind of ramped further in the second half and into 2020 and just in terms of a tailwind for NOG?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, Pete, I wouldn't say, the biggest contributor for Columbia. It's certainly a significant contributor. We've got -- we have a high tempo production for all 3 major product lines right now. So Ford is going, Virginia is going, Columbia is going. We're working -- because of the volume and because of the demand signal we have mandatory over time going at all of our plants, all 5 of our North American and our dedicated plants. And we've added some shift work in order to meet that demand, and of course, as you well know, we are capitalizing for additional growth in the future. So I -- sort of an existential operational challenge for us is to deliver good results on the existing product line and to build out the factories, in the meantime, for additional production. So I think we're kind of walking that tight rope really well right now, and we expect that momentum to carry us into 2020.

Peter John Skibitski - *Alembic Global Advisors - Research Analyst*

Okay. So you're at the early stages of all 3 of those programs? It sounds like.

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

No, we're in the early stages on Columbia. We're just mid-stride on Virginia and Ford.

Peter John Skibitski - *Alembic Global Advisors - Research Analyst*

Okay. Okay. Last one for me, Rex, how many isotope programs are you going to have post these next 2 when they come online? And then other more in the hop or ex-moly?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, there are -- Pete, we had -- the business that we bought, the former Nordion business, which is headquartered in Kanata and has a significant cyclotron operations in Vancouver, had 5 existing product lines. TheraSphere is one of the large ones, had a nice product line of the strontium and 3 others. And -- so when we bring the indium oxine online, along with gallium/germanium product, that will be 7 total product lines. Moly would make 8 product lines, and we're also working towards -- we have R&D activities on future therapeutic drugs, like lutetium-177 and actinium-225 along with an iodine 123, that we're working on that comes out in probably in a couple of years. So I mean, you can see a product portfolio of 10, 11 products in the next have dozen years.

Peter John Skibitski - *Alembic Global Advisors - Research Analyst*

Okay. That's great. And it always seem like this was going to be a higher-margin unit than the balance of NPG. Is that -- will you agree with that?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes. Generally, it's a higher-margin business than any of our businesses. We have sort of value-shop construction across most of our business, and we have gross margins that run, let's call in the low-30s typically across those 3 business units, that the historical business units. This is a more for commercial value chain kind of business with product development characteristics to it. And -- so gross margins tend to run in the, let's call it,



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

certainly north of 50, may be mid-50s contribution margin higher than that, obviously. So incremental revenue makes a real different in that business.

Operator

Our next question comes from David Stross with Barclays.

Matthew Carl Akers - Barclays Bank PLC, Research Division - Research Analyst

It's Matt Akers on for David. I want to ask about -- so nuclear power, are you able to break out what sort of organic growth would've been ex-Nordion in the quarter?

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

We actually haven't reported that separately. Historically, the thing I would say is that, we have said, when we acquired the Nordion business that you can think of that as a \$40 million or \$50 million business. And -- so you can sort of get a run rate from it, but we're not reporting it separately.

Matthew Carl Akers - Barclays Bank PLC, Research Division - Research Analyst

Got it. Okay. And then I guess, one of the one on nuclear power sort of I think your guidance implies margins drop off in the second half? Is that thing driving that? Or is that maybe the China steam generator stuff coming up?

David S. Black - BWX Technologies, Inc. - Senior VP, CFO & Treasurer

Yes, once again, we have some contract adjustments here for some close contacts, including the China steam generator project. So right now we are forecasting the year to come in around 14%.

Operator

The next question comes from Ronald Epstein with Bank of America Merrill Lynch.

Ronald Jay Epstein - BofA Merrill Lynch, Research Division - Industry Analyst

Rex, can you provide an update regarding the FDA approval processes for moly-99?

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

Sure. There's no change in that. We expect to be submitting reference batches in the summer of 2020. And then there's a timeline for approval by the FDA that we anticipate to be 7 or 8 months in link, something like that for an accelerated approval, which we -- which is the path that we believe we're on. We have had a number of meetings with the FDA, and we'll continue to have those as we move along. But the important milestone is to submit a reference batch, which was -- which is basically material that's been produced on the production equipment in the factory and then take that through FDA approval. That's the key milestone for production.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Ronald Jay Epstein - *BofA Merrill Lynch, Research Division - Industry Analyst*

That's helpful. And maybe switching gears to the Navy. When we look at increasing Navy build, we are seeing some manufacturers struggle with absorbing less trained workers, particularly in welding, and that's been resulting in rework at higher costs. Can you discuss where you are with your labor requirements and training plans that you have in place so that you could prevent quality issues, especially as we ramp up in volume for U.S. Navy work?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Sure. There's a couple of things I would say about that, one is that we certainly are ramping pretty aggressively right now. We extended over -- and had accepted our 100 offers in the last quarter. We're finding very highly qualified people. But we do have robust training programs, and we take people through sort of not -- in addition to sort of classroom training that you have to go through from criticality, safety and things of that nature. But we take them through a pretty long on-the-job training programs so that when they're released into production work, the risk of defects is -- the risk of a problem is relatively low. I would also say that, in the case of the Columbia program, it's -- I would say, it's incrementally different from Virginia and Ford, not dramatically different from Virginia and Ford in terms of the kind of technologies and materials that we use there. So there is a familiarity to it, and I think, therefore, limited amount of risk to stumbling on that product line. So we're watching it very vigilantly and believe that we're on track to do well with it.

Operator

Next question comes from Robert Spingarn with Crédit Suisse.

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

First of all -- in nuclear operations, just -- I guess, the margin falls off in the back half just due to the lower volumes because of the acceleration in to Q2, is that that why it drops below 20%?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Your question is on NOG, Rob?

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

NOG.

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

Once again, I think for NOG, we say that the high teens is going to be the margin except for the fact that you do have some pension reimbursements still for next couple of years that will take you 200 to 300 basis points higher. So we haven't claimed a specific percentage in the future except for that.

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

Okay. Okay. So if -- all right. We'll take that off-line. On -- Rex, you talked about your progress and remediating the missile tube issues, but you made a remark there about not receiving incremental orders for additional tubes yet. So I wanted to ask what your discussions are like with customers? Is there a pathway to stand the business? Or the exit?



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes. I think Rob, there's -- I think there is a pathway to stay in the business if we we want to do it. We certainly, as we said on 2 or 3 calls now, we'd want favorable terms so that we can be profitable and that could be an interesting product line for us. The discussion -- the tone of discussion is corporative and favorable. I believe that the ultimate client, the Navy and [NFC] would like to have more than one domestic supplier at least on the Common Missile Compartment tube. And -- so we continue to have productive discussions, and we'll see how it comes out.

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

Okay. And then just looking longer term for a CapEx perspective, you've talked about the 3% to 3.5% of NOG sales, but I wanted to get an idea, again, on the timing of reaching that given the ramp in the Columbia into the 2020s. And then just overall, what your CapEx looks like long-term when we factor that together with what you've been doing in the medical business?

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

The 3% to 3.5% is overall for the company is what we're seeing is our normal CapEx, once we get through this period of time of growth CapEx. This year, we say \$225 million is the amount of capital. Inside of that capital is about \$50 million for the medical radioisotopes business. We feel that there's about \$100 million more to throw on top of that. We look at this year and next year to be the 2 high capital years. And then when we get in to '21, by the end of the year, you're going to be at that 3% in the second half of the year, 3% to 3.5%. So you got this year, next year and then you're going to start coming down. But as far as medical radioisotopes, we feel \$50 million this year and is about \$100 million next year.

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

So '22 is your first..

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

Next 2 or 3 years for the \$100 million.

Robert Michael Spingarn - *Crédit Suisse AG, Research Division - Aerospace and Defense Analyst*

Got you. So -- but you got something in each of these years, it's the back half of '21 that normalizes?

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

Yes. Back half of '21 will normalize.

Operator

Our next question comes from Peter Arment with Robert W. Baird.

Peter J. Arment - *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Rex, you mentioned the 50% on the missile tube that you've completed, but you don't finish until, it sounds like early 2021. Just could you walk us through that process of just the timeline of where you expect to be, I guess, at the end of this year?



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, Peter. Right. So there's a couple of repairs that bleed over into 2020. So the vast majority, the missile tube repair work is done this year. We're all but done by the end of this year on the missile tube repairs we believe. The 2021 reference was to the normal delivery schedule that we have for the rest of those tubes. So we still have a number of missile tubes to deliver, some of which weren't even started when this missile tube welding problem occurred. So that's the story there. Repairing through this year, continuing with normal production through this year and then delivering missile tubes all the way into 2021.

Peter J. Arment - *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Okay. And then just as a quick follow-up. On the NOG growth this quarter, was the -- just the long lead items that pulled into this quarter, was that just unexpected? Or is just a timing thing? Just trying to get some clarification there.

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

No. It was not unexpected, Peter. What we -- we put some pretty good steam into Q2 because we really wanted to try to derisk the second half. And -- so as I mentioned a bit earlier, one of the other questions, we have some mandatory overtime running at a pretty high level. We added some shift work, we did prolong lead materials where we could. And -- so we put our shoulder into it to deliver that kind of a result. And we'll keep up that tempo through the year, but it was really more about trying to do derisk the second half.

Peter J. Arment - *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Okay. And then lastly, on -- you mentioned if you don't do any more missile work you'll be reallocating that capacity? Maybe you could just walk us through a little bit of that, you have the work obviously to absorb?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

We do. So the large components in our Navy program are made it to primary plants. Those are Barberton, Ohio and Mount Vernon Indiana, very large components there. And we've got more work than we have capacity right now. So that -- it is a building that we call [2 19] that was refurbished, that was a building that was built decades ago. We refurbished it for the missile tubes. It has large machine tools -- tool clips, various kinds of welding equipment, various kinds of thing that are common to both programs. And -- so it will be a pivot to Naval reactors' work, large component work in that facility should that occur. And it'll offset the capital need that we have for the overall Navy growth by somewhere in tune of may be about \$10 million or so. There are some savings to be have there if we pivot towards in our work.

Operator

Our next question comes from Michael Ciarmoli with SunTrust.

Michael Frank Ciarmoli - *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

Rex, just to stay on the missile tubes. Would there be any charges or cost, I mean, based on what you just said, it sounds like you can pretty seamlessly pivot without incurring any sort of shutdown cost, if you decide to exit the market?



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, Michael. We believe there is very low risk of a stranded capital in any case it's our material. So most of that equipment is, I don't want to say garden-variety, but it's the kind of equipment that you use for large components such as missile tubes, reactor vessels, closure heads and those kind of things. So it's a pretty easy translation.

Michael Frank Ciarmoli - *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

Okay. And just on the recent award, I mean, [DA] got the contract to produce 28 tubes. Can you just give us the background around that award? I mean it sounds like if you guys are going to participate in this market, you want to make sure your returns and margins are there. So anything that we should read into that recent award from [DAE] on your kind of future?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

So what -- the [DAE] award is for the Virginia Payload Modules, and so it looks like there've got the lion share of that. I think we've always thought our future would more around the Common Missile Compartment. We've historically won, at least about half of those orders and so that's really where our opportunity lies in the future I believe.

Michael Frank Ciarmoli - *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

But you are correct in speaking the fact that we are not interested in the future orders, unless we do have a way to make money on these orders? Got it. Got it.

And then David, just one more housekeeping, on the NPG, we talked about the margins here. Was margin increase a sole function of those contract improvements? And can you quantify what they were in the quarter?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

I don't think we quantify those separately. I will say that, yes, that margin is a very robust margin, which is going to be higher for next year. Q2 was primarily driven by contract improvements in the China steam generator project. A few other things there too. But that China steam generator project, which we've been doing that for about 3 years, is right on the verge of wrapping up. It has put a lot of income on the bottom lines so that would go out of the business, and we'll have to find ways to try to maintain margins in future. But most of it was that.

David S. Black - *BWX Technologies, Inc. - Senior VP, CFO & Treasurer*

But we also have some Nordion in there because you have the new acquisition, and as Rex has mentioned, what that business and the gross margins are in that business also help. So it's a mix of the 2.

Michael Frank Ciarmoli - *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

Got it. And then just last one for me. On the FDA update, I know you said that there was no real update. But you kind of said a 7 to 8 months process where you are on this accelerated path, you believe you're on that. Is the timeline pretty tight to get to that commercialization in the '21 time period? Is there room for any slippage if you're -- turns out you're not on that accelerated time path for 1Q '21?



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

It's -- there is a little bit of guesswork around the regulatory timeline. If you look at the history of these accelerated approvals, they kind of range anywhere from about 2 months to maybe 9 months. And -- so maybe we'll get lucky and get an earlier approval. There might be a little bit cushion there. But in terms of the rest of it, we have 3 primary kind of activities that are going towards the industrialization of the moly product line. One is this target delivery system that we put on a reactor to move the moly through the CANDU reactor to accept the neutrons, that's on track. And then the other 2 components will go into our plant near Ottawa at Kanata, and those are the radio [chem line] which is to process the material has been radiated. That involves modification of hot cells and installation of some equipment. As we said in the call here, we got this full-scale pilot plan running at Lynchburg right now, which is an identical version of the equipment that will be put into Ottawa, that's running well by the way. It's a cold chemistry process, it's not a radiated material, but it's identical. And then the final thing is the radio pharmacy -- radio pharmaceutical line, which is the line that we use to place the material into these generators. We've got contracts on all the major pieces, for example, the hole cell modifications and some other things, and then were doing plant modifications up in Ottawa. So I would say, Michael, there's a lot to do. We've got a lot -- knock done a lot of walls and install a lot of equipment and our vendors have to deliver on time. So I worry about it, I'm personally doing quarterly schedule reviews, detailed schedule reviews and obviously, the leaders of that project are looking at it every day.

So keeping our eye on it, I think there's some risk in it. But so far, so good. We're were on track.

Michael Frank Ciarmoli - *SunTrust Robinson Humphrey, Inc., Research Division - Research Analyst*

And is that transition, once you get the green light to production, yes, I know you've said you got the full-scale pilot, do you think that can be -- kind of flip that switch pretty quickly to get onto a full production?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

I think so. We're planning to do -- the way we have it planned at least kind of the way we model it financial is we're expecting to sort of crawl before we walk and walk before we run. So we'll doing a limited amount of production in the early stages. And then let's call it sort of ramping up to full production capability over a period of months. I certainly don't think we hit the main -- the main breaker, and suddenly we're producing half of the global demand or anything like that.

Operator

Our next question comes from Carter Copeland with Melius Research.

Carter Copeland - *Melius Research LLC - Founding Partner, President and Research Analyst of Aerospace & Defense*

Just a quick question, Rex, on the mix of business at NOG. I mean the comments earlier on early stages on Columbia, you seem like you're coming up the curve nicely on there and you sort of highlighted mid stride on Virginia and Ford. I just wondered, as you look forward the remainder of the year into 2021, you just look at the general sort of risk retirement opportunity at NOG? And if there is any kind of revolving change there as you transition a little bit? Any color there would be helpful.

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Okay. So maybe I'll offer a little details, Carter, before I get to you -- your question. So we think about what's going on in our shops, and we articulate this in our investor briefing, as we said before that the delivery schedule for a typical Virginia is 6 years give or take. And Navy is ordering 2 of those per year. And so think of about 12 different chipsets going through our factories at various stages of completion at any one point in time. Some of them new orders and some of them on the verge of delivery.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

And we have a single Columbia going through right now. So that would give you some sense of sort of the volume in comparison. And then for the Ford, the Navy orders 2 -- orders a Ford aircraft carrier, nuclear propulsion system every 5 years, there happen to be 2 of those systems on each carrier, and so -- and those take about 8 years to deliver. So think of anywhere between 2 and 4 different Ford ships that are going through the factory at any one point in time. So Columbia is not a dominant feature of the production right now. It's a critical feature because ramping up on it. But it just a single ship set compared to those 12 Virginia and those, let's call it, those 4 Fords.

And in terms of any risk, that's the step we're kind of knocking down day by day. We've got to learn how to process that material and do it at high tempo as we go through it. But I think, as I opined earlier, we're doing that and our Q2 results speak to that. So we're not hitting any stumbles in the Columbia line at this point in time.

Carter Copeland - *Melius Research LLC - Founding Partner, President and Research Analyst of Aerospace & Defense*

Okay. Thanks for the color. And just as a quick follow-up on NSG. The slippage versus complete removal of some of the opportunities you envision there, any color you can give us on that?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes. So the -- so our missed opportunities are in primarily what we call are NE, Nuclear Energy U.S. services business, where in one case, as David said in his script, Three Mile Island plant was shut down. We had a service outage scheduled for the second half for that. We had another opportunity, there was a swing and a miss in that business. These are not large, but they tend to be significant in the scale of the NSG operating income. And then that, we have a bit of income in our plan related to the Hanford opportunities in the second half, not large, but it is feature of our second half. And one of those 2 Hanford opportunities, the award timing, we believe is going to move into next year. And -- so that's a puts a little more risk in NSG in the second half. And that's the reason we dialed back the guidance on it. We're still in play for both of those, and we're optimistic that we could win certainly at least one of those. We have that optimism, but that's the way we characterize the -- that aspect of it.

Operator

Our next question is from Josh Sullivan with Seaport Global.

Joshua Ward Sullivan - *Seaport Global Securities LLC, Research Division - Director & Senior Industrials Analyst*

Just a question on the isotope market. Can you talk about the current pricing dynamics in the Tc-99 market, and maybe just how you see that involving as you mentioned in other market. And I guess, do you think that the older supply chain becomes obsolete supporting that market as you guys entered the market?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes. So it's an interesting question, Josh, I mean, you really got 2 players there (inaudible) Supplying North America right now, and they are supplying those from research reactors in Europe and other places. As you know, those reactors are old, those research reactors typically about 50 years old and there is supply discontinuities that result from unplanned outages and regulatory issues and all that. You can see that wreaking a little bit of havoc in the current market. So I think our entry to the market creates a continuity of supply feature that will be quite attractive to radio pharmacies and then we're kind of betting on that outcomes. As to the other entrants -- the other potential players, I think it depends on the kind of timelines they could achieve. Our plan is to get to market as quickly as possible and to reach high production tempo fairly early, and we'll see what an effect it has on the competitors.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Joshua Ward Sullivan - Seaport Global Securities LLC, Research Division - Director & Senior Industrials Analyst

Got it. And then just 1 with regards to the CANDU reactors. Are there opportunities outside of Canada? Are there international CANDU reactors that you guys might be able to address as well overtime?

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

Yes, there are a few. I mean there is 1 in Romania, Cernavoda. There's 1 in Argentina, there are a couple in South Korea, are couple in China, there are some CANDU-like reactors kind of knockoff there in India. So yes, that's right. So you could think about a global footprint with CANDU radiation services capability. And it's an interesting thing we kind of compare our island to that.

Joshua Ward Sullivan - Seaport Global Securities LLC, Research Division - Director & Senior Industrials Analyst

Any idea of timing or any things with those reactors, the coming year or is that more longer-term?

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

No, I think it's a longer-term Josh. We want to tap this North American market, which is probably half the global market, really concentrate our resources there, get stable there. And then we could think about expansion of our footprint.

Joshua Ward Sullivan - Seaport Global Securities LLC, Research Division - Director & Senior Industrials Analyst

And then just one last one on UAVs, the direction the Navy's taking with programs such as the Orca. Are there any plans to have any of those systems nuclear powered or any portion of the power supply chain to be nuclear powered? Just trying to get an idea of how BWXT might fit into the drone ecosystem as things evolve?

Rex D. Geveden - BWX Technologies, Inc. - President, CEO & Director

Yes. So I haven't heard any plans to nuclearize those kind of platforms, Josh. I think it's certainly a conceivable possibility. We are, as I've said a couple of times, working on a class of very compact high-temperature gas reactors, we're were calling those microreactors. We are concentrating on space and national security applications right now, such take-it-forward basis off the grid or providing surface power for space exploration or to power directed energy weapons. There are a lot of very interesting applications of compact reactors, and so you could conceive of that application. But I don't know if any Navy plans do that yet. I don't think you can imagine nuclear applications across a variety of national security problems though. And I'm quite bullish on it.

Operator

Our next question comes from Tate Sullivan with maxim group.

Tate H. Sullivan - Maxim Group LLC, Research Division - Senior VP & Senior Industrials Analyst

A couple of follow up for me, and you've covered a lot of them, thanks for the moly-99 and other isotope product on conversation. Rex, I was surprised, you mentioned that you're working on a single Columbian now than what is the higher cadence of work related to just dedicating more employees to that specific job.



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Well. There is that and plus there is the 2 Virginia tempo that we're in that we -- a few years ago we were not in. So it's the whole Navy 355 shipbuilding plan. So there's the 2 Virginias, there is the introduction of the Columbia, and then there is the acceleration of the Ford onto a full year order cadence at least for this next one and possibly into the future. So it's all of that combined Tate.

Tate H. Sullivan - *Maxim Group LLC, Research Division - Senior VP & Senior Industrials Analyst*

I have a follow-up. But -- I mean, I see just the shipyard ordering plan other than next Columbia is 2024 and with a 6-year timeline, does it depend on the next budgetary -- Navy budget around to start working on that Columbia or could you give any potential timeline on that?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes. So as you will know, the long lead items for those Columbia ships are -- the nuclear equipment is ordered 2 years in advance of when the ship is ordered. So when you look at the Navy shipbuilding schedule, that's the whole delivery schedule as a way to think about that. That's when the shipyards began their work. We start 2 years prior to that. So the reason why we are working on to Columbia now, the first one is because the first Columbia board is ordered in 2021. And -- so the ship that you see in 2024 gets ordered from us in 2022 and so on. So just subtract 24 months from the shipbuilding schedule to see when the reactor equipment is ordered. And of course, yes, and as always in all our programs of this nature it depends on Congressional authorization appropriation.

Tate H. Sullivan - *Maxim Group LLC, Research Division - Senior VP & Senior Industrials Analyst*

And then last follow-up for me. Was it 2 or 3 years ago you also had another China boiler order that helped margins in the quarter. Are there any replacement orders for that? Or is the tempo every or 3 years or should I not look at it that way?

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

There is the -- maybe some probability of follow-on orders. The Chinese company that we selling those steam generators to is proposing work in the U.K. for example. So it's possible if there are things out there in the future that would use our steam generator. But it's not a thing that we're counting on and planning for at this point. So you can think of that one as going out of the portfolio.

Operator, we'll take our last question.

Operator

Okay. Our last question comes from Pete Skibitski from Alembic Global.

Peter John Skibitski - *Alembic Global Advisors - Research Analyst*

Yes, Rex, just one follow-up on Nordion. This may be too simplistic. But just going from 5 product lines to 7 just excluding moly, that's a 40% increase in product lines. Is it reasonable to think that Nordion and again, ex-moly can grow double-digits in the next couple of years as some of that new product ramping?



AUGUST 06, 2019 / 12:30PM, BWXT - Q2 2019 BWX Technologies Inc Earnings Call

Rex D. Geveden - *BWX Technologies, Inc. - President, CEO & Director*

Yes, Pete, of course, all those product lines don't have the same kind of volume. And -- so the math I would offer is that, it depends on the market uptake here. But I think these 2 product lines conservatively could add incremental revenues in the 15% to 20% range. I could certainly see it going above that depending on how well the market response to it. But there's certainly existential demand for these products. And will see some growth.

Operator

This concludes our question-and-answer session. I would like to turn the conference back over to Mark Kratz for any closing remarks.

Mark A. Kratz - *BWX Technologies, Inc. - Director of IR*

Thanks. Thank you for joining us this morning. This concludes our Second Quarter 2019 Conference Call. If you have further questions please call me at (980) 365-4300. Thank you.

Operator

The conference has now concluded. Thank you for attending today's presentation. You may now disconnect.

DISCLAIMER

Thomson Reuters reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES THOMSON REUTERS OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2019, Thomson Reuters. All Rights Reserved.