

(MESC) is a leading U.S. supplier of commercial nuclear refueling services. They have completed over 1,000 refueling projects since 1987 in reactor disassembly/ reassembly, refueling, in-vessel work, and spent fuel pool activities. MESC provides quality, experience, and commitment to help you meet your project goals. MESC maintains a high standard for quality and performance which is routinely demonstrated by our highly trained and

MESC's training and qualification program ensures our field technicians consistently exceed industry expectations considering job knowledge and performance.

experienced personnel.

straight from Master Lee's website. While working outage at Wolf Creek I've had the

**Master Lee is** ready to put the clamp on the task at hand.



pleasure of working with several members of the Master Lee team. I've enjoyed their professionalism and teamwork while in containment. While putting together a list of items that we wanted to cover for this refueling outage edition of Wolf Tracks, I started down the path of listing projects that we are going to execute to get our plant back online. I looked forward to



Frank Rager, Master Lee, and Doug Erhart, Radiation Protection, prepare to remove the head of the reactor vessel.



working with so many people who only get to see during an outage. A group that I always look forward to working with is Jeremy King and his crew with Master Lee. I know their role in containment for the refuel and I have just come to expect them to be there to support our team.

That's when it occurred to me that I have a unique perspective on the relationships between Master Lee and our team here at the Creek. I felt that it might be a great opportunity to look back at the partnership that has developed over two decades and 10 refuels. I wanted to start by just cherry-picking information off the Website for Master Lee, but I soon realized that the relationship goes much deeper than a sales pamphlet or short corporate write-up. Some of the members of the Master Lee team have been here through the good times and the bad. We've traveled from INPO 1 to INPO 4 and back to



Refuel is sill Master Lee's primamry service

INPO 1 in the last 12 years alone, and it would be a disservice to just talk about their services. I wanted to sit down with the Jeremy and discuss this relationship guiding both Wolf Creek and Master Lee for the last five outages and look back at where this all started.

Jeremy King, lead project manager with Master Lee, has been assisting Wolf Creek with outage support for nearly 15 years. I sat down with the two planners and enjoyed the back and forth as they recalled a relationship that has lasted longer than most.

Scott: While working with you in containment, I didn't understand your role with Master Lee and MSEC's role with the refuel. Can you share any of your insight on how this partnership started with MESC and WCNOC?

Jeremy: Master Lee started with just a few individuals helping in the shop, helping during outages and then eventually that grew to moving fuel. The first big project that brought in a more substantial crew involvement with Canopy seal weld clamp installation. That was in the early '90s maybe around 1992. However, I believe we began our long-term contract and full-scale services for refuel 15.

Scott: Tell me a little bit about Master Lee's organization.

Jeremy: It's my 21st year with ML. It's a smaller company compared to others in the industry with more of a family atmosphere. It has advantages to be a smaller company and it's 100 percent employee-owned.

Scott: How many members of your crew will you have on-site to support your projects?

Jeremy: Our normal crew size is 37, but for this outage schedule and parallel activities, we will have 47. We're not only supporting the canopy seal weld clamps, but we are also supporting the "A" reactor coolant pump, so we have an additional eight coming onsite. On the back end of the outage, our Decon crew is coming in to spray the cavity with the insta-coat cavity spray. They will be moving in after we set the head. We go in and finish up our work, then when we're ready, they go in and strip it off and the coating pulls the contamination with it and leaves a clean surface behind.

Scott: I was looking at all your services, have you always offered that broad a list or have you started offering more as you learned the "tricks of the trade?"

Jeremy: We started as refueling services and over the years evolved into a little bit of everything. We do special projects but refuel services and Eddie Current are still our major services.

Q: During RF 21 I was in containment for pulling the lower internals from the vessel and you were there at the helm pulling the load out. Is that something you would typically do?

Jeremy: We were involved with that activity, but Wolf Creek had oversight. That's a tricky job because it's not like you have an extra lower unit in the warehouse. We take our time with that. When you set the lower internals in



This will be the second evolution installing the insta-coat in the cavity for RF23.

you must get aligned with the key ways in the lower vessel before you can get set on the guide studs so it's a slow-moving process while lowering a couple hundred thousand pounds.

Q: I feel the big project in this outage is all the head work including the clamps and the under-head peening. Are there other parts of the schedule you are supporting?

Jeremy: the RCP motor is another activity we are supporting. These are critical path activities that must work in schedule and will occupy a lot of time around the hatch and they also occupy a lot of crane time on both the polar crane and the knuckle boom, so they will both be crucial for schedule.

## Q: One last question, what do you feel is key for our outage success?

Jeremy: We've been here, we know the plant. We know the people and the team we have. This is a team thing. We look at this as a group effort. It's not a Master Lee thing; we're all trying to work together for the same goal. It's not like that at every plant. It's everyone that has done this before us that has instilled that, and it's carried on with Dennis Parks and now Jason Bolen. It's a great thing.





Example of the clamps installed on the canopy seal welds.

