



## TMI-2 Community Advisory Panel Meeting Minutes

**Date:** Thursday, January 19, 2023

**Time:** 6:00pm – 7:30pm

**Location:** Virtual\*, accessible via [www.tmi2solutions.com](http://www.tmi2solutions.com)

Dial In: +1 385-500-4880, Conference ID 500079013#

### I. Welcome and Attendance, Steve Letavic – CAP Chairperson

- a. In Attendance (Virtual): Steve Letavic, Marie-Louise Abram, Hannah Pell, Richard Kluskiewicz, Amy Burrell, Shen Kreiser, David Shoff
- b. Absent: Joyce Corradi, Jim Hazen, Jay Ostrich, Dominick DiFrancesco, Bart Shellenhamer, Scott Miller, Curtis Miner

### II. Decommissioning Project Status Update, Frank Helin – TMI-2 Project Director

#### a. Overall Assessment, Challenges/Risks

- i. Safety and budget performance remain steady, and the team remains focused on transitioning to active decommissioning work upon license amendment approval from the Nuclear Regulatory Commission (NRC).
- ii. Challenges and risks include:
  - 1. Delay in transition to DECON from Q1 to Q2 2023  
Longer term challenge remains reduction of general area dose-rates
    - a. Technical challenge, aim is to reach comparable status of a plant that has not experienced a core-damage accident
  - 2. Post-defueling monitored storage (PDMS) condition allows limited work to be done other than monitoring necessary to ensure radiological conditions are stable.

#### b. Safety Performance

- i. Project starts every meeting with a safety message and continues weekly safety toolbox talks to reinforce good safety practices.
- ii. No contamination events in 2022 and dose goals were met.
  - 1. Recent contamination event (Personal Contamination Event, PCE) in January 2023 where worker got contaminated; causal analysis is being performed.

#### c. Project Highlights

- i. Programs and processes being self-performed by TMI-2, including fire protection, radiological protection, and engineering.
- ii. Radiation protection is continuing in-depth surveys of Reactor Building, Auxiliary Building, and Fuel Handling Building to finalize plans for source term reduction activities.
  - 1. Focus remains on protection of personnel and minimizing radiological risk.

#### d. Technology

- i. The project is leveraging new technologies to maximize performance, including use of drones, scanners (N-Visage), robotics (Boston Dynamics) and videos.
  - 1. Data collected from scanner surveys can be input into the TMI-2 Building Information Model (BIM).



**e. Critical Path**

- i. Critical Path to transition to active decommissioning (DECON) depends on NRC approval of the DECON License Amendment Request (LAR).
- ii. Preparations for entering active decommissioning include:
  1. Removal of Reactor Building equipment hatch to allow D&D equipment to be moved into the Reactor Building and contaminated equipment to be removed from the Reactor Building into the Containment Air Control Envelope (CACE).
  2. Refurbishment and load testing of the RB Polar Crane.
  3. Construction of the Decommissioning Support Building (DSB), which will help us with cutting and packaging radioactive waste from the Reactor Building for sufficient disposal.

**f. Project Focus Areas**

- i. Designing a structure to support material handling (DSB).
- ii. Survey and dose reduction efforts.
- iii. Programs in place to implement DECON LAR when approved.
- iv. Continue to work closely with TMI-1 as they move to SAFSTOR status, as well as support services, combined site-wide programs (e.g., environmental monitoring, Emergency Plan, security).

**g. Steve Letavic (CAP Chairperson) asks for questions.**

- i. Question 1 (Rich Janati): You talked about removal of remaining damaged fuel, can you mention a few other examples of work that will significantly reduce the source term to prepare for getting to a level comparable to other plants?
- ii. Question 2 (Rich Janati): As far as approval of the DECON LAR, do you have contingencies in place in case the approval takes longer than expected to maintain the work force onsite? Not sure if you have any commitments from the NRC [on timeline].
- iii. Answer to Question 1 (Frank Helin): Most of the significant problem areas are the result of fuel bearing material deposits in the reactor vessel. We have plans to cut up the reactor vessel appropriately to store the remaining damaged fuel in spent fuel casks. Other examples of source term reduction activities include removal of the steam generator and other large components. There is significant source term in the Reactor Building basement; we have concerns about the fission products that have been absorbed into the concrete as a result of flooding from the accident.
- iv. Answer to Question 2 (Frank Helin): The regulatory affairs staff maintain close communications with the NRC, and we are now looking at mid-March timeframe for approval of the LAR. We do have contingency plans and some of them have been implemented; we've looked at the work that can be done that's allowed under the Post-Defueling Monitored Storage condition and at work initially planned for the future but that is currently allowed by the license basis. For example, this past week we installed truck radiation monitors at the site that will not be used for a period of time but will be needed eventually.



- v. Question 3 (Dave Allard) – Will the radiation truck monitors be used for all waste that goes offsite?
- vi. Answer to Question 3 (Frank Helin) – Yes, they will.
  - 1. *CAP Secretary Clarifying Note – Only non-radioactive waste will go through the monitors to ensure no radioactive waste is inadvertently shipped as clean. Radioactive waste is monitored separately.*

### III. Regulatory Update, Tim Devik – TMI-2 Licensing Manager

- a. Amy Hazelhoff (VP of Regulatory Affairs, EnergySolutions) noted that Tim Devik is unavailable due to travel, but wanted to take the opportunity to introduce herself as the new VP of Regulatory Affairs for EnergySolutions as of December and that she is excited to learn more about the TMI-2 CAP.
- b. **PDMS to DECON License Amendment Request (LAR) Status – Jim Byrne, Licensing Contractor**
  - i. Jim Byrne introduced himself, shared that he first started at TMI shortly after the accident, worked with GPU Nuclear.
  - ii. DECON LAR was originally submitted back in February 2021 ([ML21057A046](#)), we've had numerous interactions with the NRC, and have been providing answers to the RAIs except for one which has to do with the source term. We have reviewed and researched historical documentation and could not determine how GPU Nuclear developed source term figures back in the 1990s, so we are reperforming the accident analysis in the event of a fire in the Reactor Building.
- c. Emergency Plan Status
  - i. One emergency plan for the Three Mile Island site, requires an update to reflect transition of TMI-2 to active decommissioning.
    - 1. Constellation owns the site Emergency Plan, have been coordinating with TMI-1 on the update because it depends on the results of the fire scenario analysis.
  - ii. Question 1 (Rich Janati) – How does this new source term for the TMI-2 fire analyses compare to the old source term? You mentioned that there are no EALs... [Emergency Action Levels]
    - 1. Answer to Question 1 (Jim Byrne): The GPU Nuclear calculation in question provided an analysis of what could be released from a fire in the Reactor Building, but old calculation that determined how source term could be released could not be located, modeled off of a fire scenario without additional controls; it would just burn itself out inside the Reactor Building. But in active decommissioning we will be controlling amounts of activity and combustible material, so that even if it would ignite, the offsite release would be significantly less than an Unusual Event, and therefore no Emergency Action Levels are required.
  - iii. Question 2 (Rich Janati): Source term is at a low level because assumptions were extremely conservative, so there will be nothing that would impact the offsite response?



1. Answer (Jim Byrne): The update to the TMI Emergency Plan would not impact offsite response.
- d. **Post-Shutdown Decommissioning Activities Report – Hannah Pell, TMI-2 Licensing Engineer/CAP Secretary**
- i. TMI-2 Solutions submitted a revision to the PSDAR in October 2022 ([ML22276A024](#)).
    1. “The purpose of the PSDAR is to provide the NRC and the public with a general overview of the licensee’s proposed decommissioning activities and to inform the NRC staff of the licensee’s expected activities and schedule so that the staff can plan for inspections and make decisions about its oversight activities.” ([Reg. Guide 1.185](#))
  - ii. Revision includes:
    1. Updated information from supplements to the DECON LAR as well as historic and cultural resources.
    2. Added to description of decommissioning plans, including construction of a Decommissioning Support Building (DSB) and Interim Waste Storage Facility (IWSF).
- e. **Historic and Cultural Resources – Hannah Pell, TMI-2 Licensing Engineer/CAP Secretary**
- i. NRC issued a Request for Additional Information (RAI) on TMI-2 historic properties and cultural resources ([ML22357A014](#)) related to the Section 106 process ([36 CFR 800](#)).
  - ii. Historic preservation efforts are being established to be implemented as the TMI-2 decommissioning project progresses (e.g. taking photographs or videos of decommissioning work as performed).
    1. TMI-2 Solutions is coordinating with the State Historic Preservation Office (SHPO) on a plan to salvage and preserve the TMI-2 Main Control Room ([ML22343A161](#)).
  - iii. Cultural Resources Protection Plan and associated environmental procedures will be implemented to prepare for transition to active decommissioning.
- f. **Records Exemption Status – Hannah Pell, TMI-2 Licensing Engineer/CAP Secretary**
- i. TMI-2 received approval of the Records Exemption from the NRC. ([ML22271A975](#))
  - ii. Exemption reduces the required paperwork retention for abandoned systems and structures and components which will be removed during site clean-up and decommissioning.
  - iii. TMI-2 will continue to preserve a significant volume of documents (including historical documents) required under the Technical Specifications and federal regulations for recordkeeping.
- g. **NRC Inspection Status – Hannah Pell, TMI-2 Licensing Engineer/CAP Secretary**
- i. NRC Inspection Activities 12-15 September 2022
    1. TMI-2 Radiation Protection Program Inspection



2. Issue of Concern (IOC) related to the review of work being scheduled and performed
- ii. TMI-2 Materials Security Program Inspection (10 CFR Part 37)
  1. No issues identified
- iii. NRC Management Visit, 12-15 September 2022
  1. Discussions on planned accident cleanup as well as LAR development and RAI responses
- iv. NRC Inspection Visit 25 October 2022
  1. Discussed the IOC and RP program
  2. Discussed work review process for PDMS license basis
- v. NRC Exit Meeting for 4th Quarter 2022 scheduled for 25 January 2023

#### **IV. Agency/Advisory Board Updates**

##### **a. Pennsylvania Department of Environmental Protection (PADEP), Dwight Shearer – Director, Bureau of Radiation Protection (BRP)**

- i. Dwight Shearer comments that, as far as PADEP's update, we want to thank everyone. We [PADEP BRP] are being kept in the loop through calls with the NRC, and the BRP decommissioning staff participates in daily safety briefings. At this point, PADEP is very pleased with all the communications and being included in everything.

##### **b. Decommissioning Nuclear Safety Review Board (DNSRB), Bill Ostendorff – Chairperson**

- i. Bill Ostendorff: DNSRB had a meeting onsite in November this past year. Grateful to PADEP and CAP members who were able to participate.
- ii. DNSRB focused on Radiation Protection training; site is not perfect, but management has been responsive. Next DNSRB meeting will be onsite at the end of April 2023.
- iii. Steve Letavic (CAP Chairperson) – Want to take the opportunity to thank DNSRB for their oversight. Very good for us as the host municipality and really brings us a level of confidence when DNSRB comes to site, help us in our interactions with residents.

##### **c. Nuclear Regulatory Commission, Amy Snyder – TMI Project Manager**

- i. NRC was unable to participate in this meeting.

#### **V. Community Advisory Panel Business, Steve Letavic – CAP Chairperson**

- a. Previous meeting minutes (June 2021, September 2022)
  - i. Motion to pass (Steve Letavic), seconded (Marie-Louise Abram).
  - ii. Action: Meeting minutes will be made available on the TMI-2 Solutions website.
- b. Next TMI-2 CAP meeting, early May timeframe.
  - i. CAP Secretary will coordinate with CAP members on a date, potential option for a hybrid meeting.

#### **VI. Community Advisory Panel Open Discussion, Steve Letavic – CAP Chairperson**

- a. No TMI-2 CAP open discussion.

#### **VII. Public Question and Answer Period, Steve Letavic – CAP Chairperson**

- a. Question (Rich Janati) – Have there been any changes to TMI-2 CAP membership, or do we foresee any changes?



- i. Answer (Steve Letavic) – At this point there have not been changes to membership, though we will be reviewing membership and meeting attendance. We do hope for continuity of membership if possible.
- b. Question (Dave Allard) – As a citizen, I really appreciate everyone’s work giving the presentations. Looking at the numbers on the Teams call, it’s quite an improvement of the previous meetings, though was wondering if there were any press releases notifying folks that this [meeting] was going to happen?
  - i. *CAP Secretary Note: There were approximately 25 virtual attendees to the meeting.*
  - ii. Comment/Suggestion (Dave Allard): Hoping that future meetings get some more attention... Maybe publishing a short writeup? Lancaster, Patriot News... I think there’s going to be a fair amount attention, especially with this new movie Nuclear Now!... TMI is really a big focus as far as the nuclear industry, and if we want to really tackle climate change, the successful cleanups of these accidents is quite important. Maybe a press release on tonight’s meeting and announcing the next.
- c. Steve Letavic (CAP Chairperson) – It’s something we’ve talked about internally and realize that this [press releases, coordination with local news outlets] is important. My opinion is that the nuclear industry was made safer because of the TMI-2 accident.