

**From:** [Davis, J.Michael](#)  
**To:** [Doell, Marlayna](#)  
**Subject:** [External\_Sender] Fuel Pool pattern  
**Date:** Friday, March 19, 2021 8:34:38 AM  
**Attachments:** [image001.png](#)  
[ACP 1208.57 018.pdf](#)

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Marlayna,

In answer to your question on how we arrange fuel bundles in the fuel pool, see attached and excerpt below. Let me know if this answers your question.

Mike

We use a checkerboard pattern – freshly discharged assemblies must not be face adjacent to each other. Additionally, we cannot place freshly discharge assemblies in rack leg support locations. “Freshly discharge assemblies” is defined as assemblies having less than one year of decay time.

From Section 4.4.9 of ACP 1208.57:

- (i) When developing a fuel moving plan, ensure that all the following precautions for placement of freshly discharged fuel (fuel having less than one year of decay time) are met:
    - Freshly discharged fuel from the reactor core shall not be placed within two rows of the Spent Fuel Pool walls. 'Freshly Discharged Fuel' has less than one year of decay time.  
{C001}
    - Freshly discharged fuel from the reactor core shall not be placed in spent fuel rack positions that have leg supports below them. See Attachment 1 for these positions.  
{C002}
    - All freshly discharged fuel from the reactor core shall be surrounded by non-freshly discharged fuel assemblies/bundles or empty rack positions on all face-adjacent sides while in the spent fuel pool racks. The exception is during interim configurations during fuel shuffle operations. The Spent Fuel Pool shall be configured prior to every Refueling Outage to support this configuration.  
{C002} {C003}
    - For ALARA concerns, minimize the number of freshly discharged bundles placed near the third and fourth rows of the East, South, or West walls of the Spent Fuel Pool. This constraint needs to be weighed against fuel storage limitations in the fuel pool.
    - If freshly discharged fuel is placed within the fourth row from the east, west, or south Spent Fuel Pool walls, Health Physics shall perform one of the following:
      - (i) Perform radiation surveys of the affected areas on the RB third floor and/or fourth floor during and after the move.
- OR
- (ii) Monitor the areas with ARMs and survey areas after move as determined by the HP Technician.

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