

**MEMORANDUM FOR THE RECORD****SUBJECT: McNary Spillbay Cranes 6 and 7 lift limits have been met.**

**Narrative:** On January 26, 2023, Walla Walla District Design Sections issued a memo, which allowed McNary to perform two overloaded engineered lifts per Spillway Crane per year. At this writing, McNary Dam has now performed all the allowed overloaded lifts.

Crane 6:

- Lift 1: April 12, opened Bay 6 to 6-ft open for spill season. Overloaded by 41.8 tons total. Overloaded one side by 29.3 tons and the other by 15.2 tons.
- Lift 2: April 18, placed gate on support dogs for a post-lift inspection. Overloaded one side by 11 tons.

Crane 7:

- Lift 1: April 12, opened Bay 2 to 4-ft open for spill season. Overloaded by 26 tons total. Overloaded one side by 17.1 tons and the other by 13 tons.
- Lift 2: April 18, placed gate on support dogs for a post-lift inspection. Overloaded by 1.95 tons total. Overloaded one side by 5.9 tons.

McNary Dam cannot perform any additional overloaded lifts without violating NWW guidance, EM-385-1-1 16.F.03 (3) d, ASME B30.2 2-3.4 and OSHA 1910.179(n)(1). Overload lifts would include any further adjustments Spillway Gates 2 and 6 this spill season or closing the spillway gates at the end of the spill season, as prescribed by the Fish Passage Plan and potentially any maintenance and repairs on spillway equipment.

Design Branch had a meeting last week to discuss this issue. They do not see any way around the safety standards of ASME B30.2. If the crane operates **ABOVE** (less weight than) the rated capacity, it shall comply with these safety standards. Since both cranes have already performed two Planned Engineered Lifts within 12 months, we recommend that they are only operated within their rated capacity.

**Location:** McNary spillway.

**Method:** At this time the below caution order has been placed on both cranes:

**CAUTION: OVERLOADING THIS CRANE IS A VIOLATION OF EM-385, ASME, AND OSHA STANDARDS.**

- **DO NOT** ADJUST GATE OPENING OF A FULL GATE WHEN THERE IS FLOW UNDER THE GATE. IT WILL OVERLOAD THE CRANE.
- **DO NOT** PUT A FULL GATE DOWN ONTO SEAL OR TAKE A GATE OFF OF SEAL WHEN THERE IS FLOW OR WILL BE FLOW UNDER THE GATE. IT WILL OVERLOAD THE CRANE.

- **DO NOT PERFORM ANY OTHER TASK THAT YOU THINK MAY OVERLOAD THE CRANE.**

Acceptable lifts that will not overload the crane:

- Lifting a full gate in a dry slot
- Moving a full gate when the gate is out of a slot
- Lifting half of a gate

**Timeline - Duration:** At this time, approximately one year.

**A. Species:** NA

**B. Origin:** NA

**C. Length:** NA

**D. Marks and Tags:** NA

**E. Marks and Injuries Found on the Carcasses:** NA

**F. Future and Preventative Measures:** Project and District staff will continue to discuss this issue.

**G. Photos Taken:** No

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McNary Lock and Dam**