

- 1 **Q. (Reference Application Volume 2, 2021 Facility Rehabilitation, page 2) It is stated**
2 **“The bypass pipe is directly connected to the plant penstock without an isolating valve.**
3 **Failure of the bypass pipe would lead to major plant flooding while the head gate is**
4 **being closed.” Was this a flaw in the original design? Is it an issue at NP’s other**
5 **hydroelectric stations?**
6
- 7 A. Horse Chops Hydro Plant was constructed in 1954 and the deterioration of the steel
8 bypass pipe is the result of 66 years of operation. The principal reason for the 2021
9 project is to replace the deteriorated bypass pipe.
10
- 11 The lack of an isolation valve is not a flaw in the original design. However,
12 incorporating an isolation valve into the new bypass pipe at this time will avoid the need
13 to dewater the penstock whenever there is a need to perform future repairs on the bypass
14 pipe. This will improve the future safety and operation of the plant.
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- 16 All of the Company’s hydro plants have bypass systems around the main inlet valves.
17 Each hydro plant has its own unique design. Plants currently without isolation valves
18 will be assessed on a project by project basis to determine if the addition of an isolation
19 valve is warranted.