

2018-IP22: SaskPower's Decision to retire Boundary Dam Units 4 and 5

On the 9 July, SaskPower announced their decision not to retrofit CO₂ capture to its coal-fired units 4 and 5 at Boundary Dam power station. These two units are relatively small and are reaching the end of their lives. After considering all options, including CCS, these units will now be retired in 2021 and 2024, respectively. SaskPower assure that they will achieve their 40% emissions reductions across their portfolio of generation by 2030 by continuing CCS at BD3, increased renewables, grid improvements and they are evaluating CCS for their larger unit at the Shand power plant. They give their decision and reasons in a press release at https://www.saskpower.com/about-us/media-information/news-releases/2030-emission-reduction-goal-progressing.

The International CCS Knowledge Centre (set up by BHP Billiton and SaskPower) has issued a response to this decision. They highlight the benefits from the learnings at BD3, which are now being applied to the feasibility study of CCS on the Shand power plant (in which they are involved). This will involve scaling capture from a 150 MW coal-fired unit to 300 MW coal-fired unit. This feasibility study ensures the scaled-up capture process requires no additional water consumption, achieves part-load capture rates higher than 90%, and is able to vary output to support variable renewable generation on the grid. We are familiar with the learnings from BD3 that suggest a 30% cost reduction in future similar facilities, but this study's preliminary findings indicate the potential for "significantly deeper cost reductions" still. This work is expected to be reported later this year and will inform SaskPower for their decision-making on Shand. Aspects of it will also be presented at GHGT-14. This work will also be relevant to other larger units to be considered for retrofitting with CCS in the coming years. The Knowledge Centre's response can be found at https://ccsknowledge.com/news/response-saskpowers-decision-on-boundary-dam-units-4-and-5.

As you might expect, this decision is generating media interest in Canada.

Tm Dixon 10/07/2018