EPT Implementation

CASA Five Year Review Keith Denman October 22, 2007

Overview – how we did it

- Cross– ministry government Steering Committee
- Internal staff working groups formed based on five areas:
 - Mercury
 - Emissions Trading
 - Hot Spots
 - Standards
 - Approvals
- Stakeholder advisory groups
 - Overall Implementation, Emissions Trading, Mercury,
 Hot Spots (formed later in the process)

Mercury Control

- Proposals received from all companies. Currently under review by Alberta Environment.
- EPCOR Genesee Power Plant proposal:
 - Genesee Station targeting 70% capture, of mercury from the coal burnt using brominated activated carbon injection.
 - On the older PC Units 1 and 2 with ESPs, augment this with combustion optimization.
 - The combustion optimization will be completed on one unit this winter and tested next year. The results will determine whether the second unit will also be modified.
 - A full-scale ACI test is scheduled in 2008 on the newer PC supercritical Unit 3, which is equipped with an SDA and baghouse.

Update

- TransAlta Sundance and Keephills Power Plants proposals (see Stream A, Session A6 for more details, Terry Brown presentation):
 - TransAlta completed a 30 day ACI injection program on their Sundance Unit 5 in 2006.
 - A similar testing program, injecting activated carbon, was undertaken on Keephills Unit 2 at the beginning of August 2007, for 10-12 months. A variety of different sorbents and feed rates will be tested during the first 4-6 weeks of the program.
 - Company intends to select the sorbent producing the most favorable results and continue with a steady state of operations for an extended period of time. This will enable an assessment of the effect of seasonal weather conditions on the effectiveness of the activated carbon.

Update

• ATCO – Battle River Power Plant

• In 2008, ATCO is planning an extended test on BR5. This will involve injection of BAC in front of the ESP. The test will address specific concerns, as well as others identified by testing being done at the TransAlta plants.

Emissions Trading

- Three phases:
 - System design
 - Legal framework
 - Administrative framework
- Designed overall system in conjunction with stakeholder advisory group
- "A to Z" system design document on website
- Regulation 33/2006 in Alberta Gazette March 15, 2006
- On-line registry, baselines, credits imminent

Hot Spots

- Protocol drafted outlining:
 - procedures for determination of hotspot
 - Internally generated
 - Externally generated
 - Response to a declared hot spot
 - Protocol available on website

Standards/Approvals

- "BATEA" standards will be implemented through the EPEA approval system
- Ten year approvals, varying design lives, five-year review meant approvals alone not sufficient
- "Alberta Air Emission Standards For Electricity Generation" used to apply standards to facilities, available on the website
- Standard clauses drafted for use in Approvals, already in Battle River approval

Public/Stakeholders

- In addition to the various teams several opportunities were made available for public comment on the implementation
 - Met with Wabamun community members (Dec 14, 2004)
 - Overall Implementation meetings held in Stony Plain (March 19, 2005), Calgary (April 16, 2005)
 - Meeting on Emissions Trading in Calgary(June 20, 2005), mercury held in Edmonton (June 22, 2005)
 - Baseline workshops for Industry in Edmonton March
 13, 2006 and Calgary March 14, 2006

Rubber Chicken circuit

Dog and Pony Show headed out on the road:

- IPPSA (lunch and annual conference)
- Bow City residents
- CASA Board
- NCIA
- CEMA

- EUEC
- EUB staff
- CPANS
- Inside Education
- Mpumalanga delegation

Lessons learned

- Stakeholders are our friends
 - Provide clarity on recommendations
 - Hold our feet to the fire
 - Provide sage advice on details
- Debates don't end at the CASA Board
- Clarity in recommendations important
- GoA must consider resourcing, "home" for resulting programs in CASA work