

Clean Air - Clean Jobs Act **HB10-1365**

UPDATE

RAQC Board Meeting
November 5, 2010

Presented By:
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Executive Director
Colorado Dept. of Public Health & Environment

HB10-1365 Update

Legislative Declaration

- “A coordinated plan of emission reductions from these coal-fired power plants will enable Colorado rate-regulated utilities to meet the requirements of the federal Clean Air Act and protect public health and the environment at a lower cost than a piecemeal approach”
- “ A coordinated plan...will also promote the use of natural gas and other low-emitting resources to meet Colorado electricity needs.”

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Scope

- **Applies to regulated utilities that own or operate coal-fired electric generating units.**
- **Requires a plan covering at least 900 MW or 50% of the utility's electric generating units, whichever is smaller.**
- **Plan is to:**
 - Reduce NOx emissions by 70%-80% or greater
 - Reduce other pollutants for consistency with current and reasonably foreseeable requirements of state and federal Clean Air Acts

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Scope (Cont.)

- **Utility emission reduction plan considers some or all of:**
 - New emission control equipment
 - Retirement/replacement of coal-fired units with natural gas or other low-emitting resources
 - Conversion of coal-fired units to natural gas
 - Long Term fuel supply agreements
- **Demonstrate full implementation by Dec. 31, 2017**
- **Be approved/modified by PUC**
- **Shall be considered by AQCC as part of Regional Haze SIP**

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CDPHE Role

- “Comment on air quality, all other pollutants, and other emission reductions of the plan”
- Evaluate and determine whether the plan is consistent with current and reasonably foreseeable requirements of the federal act”

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Xcel Proposed Plan

- Involves 4 power generation facilities (8 units):
 - Cherokee (Commerce City): 4 units
 - Valmont (Boulder): 1 unit
 - Pawnee (Brush): 1 unit
 - Hayden (Craig): 2 units
- Controls on: Pawnee (FGD & SCR), Hayden 1 & 2 (SCR)
- Retire/Replace: Valmont 5, Cherokee 1,2 & 3 (combined cycle natural gas power facility)
- Current Discussion Surrounds Cherokee 4:
 - Resulted in a 10/25/10 Preferred Plan update
 - Key questions:
 - Retire by 2017?
 - Switch fuel by 2017?
 - Control with SCR by 2017?

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*Xcel Proposed Plan: Emission Reduction Estimates
(not including Hayden Reductions)*

Pollutant	2017 (without Cherokee 4 retirement)	2022 (with Cherokee 4 retirement)
NOx	13,862 tpy (76% reduction from 2008 levels)	16,527 tpy (91% reduction from 2008 levels)
SO2	16,524 tpy	18,502 tpy
CO	166 tpy	308 tpy
Mercury	188 lb/yr	194 lb/yr
PM	67 tpy	101 tpy
CO2	8,000,000 tpy	10,000,000 tpy

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Recent Chronology/Process

- PUC:
 - 8/13/10: Xcel proposes Preferred Plan
 - 9/17/10: CDPHE submits report saying plan is “consistent with current and reasonably foreseeable requirements”
 - 9/29/10 – **Early October**: PUC decides Cherokee 4 portion of Preferred Plan must be reconsidered
 - 10/25/10: Xcel submits modification to Preferred Plan
 - By 12/15/20: PUC approves/modifies plan

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Recent Chronology/*Process (Cont.)*

- AQCC:
 - 9/16/10: “Noticed” two utility emission reduction plans as part of Regional Haze SIP
 - 12/16/10: Regional Haze Hearing
- EPA
 - 2011: Review and approve Regional Haze SIP after AQCC approval, legislative review and submittal by Governor

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Ramifications for RAQC Ozone Planning

- Plan provides significant NO_x reductions from large stationary sources
- Reductions will significantly support, but not solve ozone SIP development challenges
- Not a “silver bullet”, but a very important strategy
- Modeled Ozone benefits...

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Ozone Benefit Modeling Results

(Concentrations: ppb)

Monitoring Site	Base Case (2020)	2020 Xcel Plan (2020)	Net Benefit Of Xcel Plan
Rocky Flats North	75.2	74.40	.80
Chatfield	72.5	71.84	.66
NREL	72.1	71.46	.64
Fort Collins West	72.0	71.22	.78
S. Boulder Creek	70.4	69.54	.86