

IGCC Working Group

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Three factors



- **Energy Facility Site Evaluation Council (EFSEC)**
 - > Energy Facilities – site locations; 80.50 RCW
 - > Carbon dioxide mitigation; 80.70 RCW
 - > Agency operations and public records; Chapter 463-06 WAC
- **Washington State Department of Ecology (DOE)**
 - > Carbon dioxide mitigation; 80.70 RCW
 - > Carbon dioxide mitigation program for fossil-fueled thermal electric generating facilities; Chapter 173-407 WAC
- **Washington Utilities and Transportation Commission (WUTC)**
 - > Integrated resource planning; WAC 480-100-238
 - > Electric companies purchases of electricity from qualifying facilities and independent power producers and purchases of electrical savings from conservation suppliers; Chapter 480-107 WAC

State policy on CO₂ emissions by fossil-fueled electric generating facilities



- The Washington Legislature has not enacted a comprehensive policy regarding CO₂ emissions. But:
- Washington requires mitigation of CO₂ emissions from all new and certain modified fossil-fueled thermal electric generating facilities with generating capability of more than 25 MWe (WAC 173-407-010 (1)) and
- The Legislature enacted laws authorizing EFSEC to require CO₂ mitigation as a provision of facility site certifications.

Mitigation projects means one of:



- Energy efficiency, clean and efficient transportation, qualified alternative energy resources, demand side management of electricity consumption, and *carbon sequestration programs* (emphasis added)
- Direct application of combined heat and power (cogeneration)
- Verified carbon credits traded on a recognized trading authority or exchange
- Enforceable and permanent reductions in CO₂ or CO₂ equivalents through process change, equipment shutdown, or other activities approved as part of a carbon dioxide mitigation plan

Source: RCW 80.70.010 WAC 173-407-020

Carbon dioxide mitigation required under RCW 70.94.892 and WAC 173-407-030



The Department of Ecology can implement carbon dioxide mitigation programs for fossil-fueled electric generation facilities with more than 24,000 kilowatts generating capability but less than 350,000 kilowatts generation capability, except for fossil-fueled floating thermal electric generation facilities under the jurisdiction of the EFSEC.

Sources: RCW 70.94.892 and WAC 173-407-030.

Carbon dioxide mitigation required under RCW 80.70.020



- New fossil-fueled thermal electric generation facilities $\geq 350,000$ kw and fossil-fueled floating thermal electric generation facilities of $\geq 100,000$ kw
- New fossil-fueled thermal electric generation facilities with $25,000$ kw $<$ station-generating capability $> 350,000$ kw.....
- Fossil-fueled thermal electric generation facilities with generating capability $\geq 350,000$ kw with a certification agreement but plan to increase the output of CO₂ emissions by $\geq 15\%$
- Fossil-fueled thermal electric generation facilities with $25,000$ kw $<$ generating capability $< 350,000$ kw and apply to permanently increase the generating capability by at least $25,000$ kw or to increase the output of CO₂ emissions by $\geq 15\%$, whichever is greater.

Jurisdiction of the WUTC: Integrated Resource Planning



"Lowest reasonable cost" means the lowest cost mix of resources determined through a[n] ... analysis of a wide range of commercially available sources. *At a minimum, this analysis must consider* resource cost, and the *cost of risks associated with environmental effects including emissions of carbon dioxide.*
(emphasis added)

Source: WAC 480-100-238 (2)(b)

Jurisdiction of the WUTC: Bidding Rules



Washington requires an RFP process but the rules do not preclude a utility from acquiring resources outside of the RFP process.

When there is an RFP process, the rules establish that:

At a minimum, the ranking criteria must recognize resource cost,

and environmental effects including those associated with resources that emit carbon dioxide (emphasis added).

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Source: WAC 480-107-035 (2) Project ranking procedure

WUTC's position on resources acquisition issues



- There is no pre-approval in Washington. The commission will consider the information:
 - > reported in the integrated resource plan (WAC 480-100-238 (6)) and
 - > obtained through bidding procedures (WAC 480-107-001(2))when it evaluates the performance of the utility in rate and other proceedings.
- The commission will fully consider the utilities' argument and evidence for why they chose an IGCC facility over other alternatives when the utility makes its case for the produce of its decision

IGCC versus traditional supercritical pulverized coal unit



- The state of Washington has no statutory policy favoring or disfavoring coal-fired generation to serve future electricity needs.
- The commission has no specific policy regarding IGCC versus pulverized coal.
- The commission's integrated resource planning rules require "an assessment of a wide range of conventional and commercially available non-conventional generating technologies" with consideration of "the costs of risks associated with . . . carbon dioxide."