

Environmental compliance costs for existing system resources: Purpose

- Council's task under the Power Act: determine and compare costs, including environmental costs, of *new* resources
- Task is *not*: determine and compare environmental costs of *existing* system resources and then make decisions about those resources
- Even so, need to estimate incremental costs of existing system resources to assess how those resources might operate and dispatch, so as to understand how new resources fit in
- **Includes estimates of the costs and operational effects of compliance with environmental regulations by existing system resources**

Environmental compliance costs for existing system resources: Details

- New final and proposed environmental regulations since time of Sixth Power Plan (see list on pp.2-3): more than just carbon emission regulation
- Need estimates of future costs of compliance: (a) capital costs and (b) operations and maintenance costs
- Explanatory paper and cost tables not quite finished
- Different levels of information/certainty for cost estimates
- **Key issue is which estimated costs to include in RPM vs. costs to discuss in narrative**

Environmental compliance costs for existing system resources: Preliminary conclusions (1)

- Significant efforts already to comply with new regulations – e.g., capital and operating costs to comply with new mercury and air toxics standards
- Cost estimates for existing system that are important for RPM are the incremental o&m costs, especially variable o&m costs
- So far, estimates of additional o&m costs to comply with new environmental regulations do not appear to be significant in terms of whether and when the existing plants will operate

Environmental compliance costs for existing system resources: Preliminary conclusions (2)

- O&M cost estimates for environmental compliance:
 - Compliance actions recently completed, committed to, or under construction: cost estimates relatively solid -- include in RPM
 - Near-term compliance actions, within the next 5 years: fairly good estimates -- include in RPM
 - Long-term potential compliance actions: most uncertainty, both as to the accuracy of the estimates as well as the occurrence of them at all (e.g., compliance with regional haze regulations for Valmy and Colstrip 3&4; or e.g., with proposed or potential regulations) -- capture in narrative, but do not include in RPM

Environmental compliance costs for existing system resources: Preliminary conclusions (3)

- *Capital* costs for some compliance *may* be so significant that owners will have a decision point whether to incur those costs
- Potential capital costs – and the investment decisions that those costs raise -- are not a factor, an input, or an outcome in the RPM
- Decisions whether to incur capital costs vs. retire plant will have to be handled outside RPM through scenario planning
- Coal plant retirement scenarios already planned can be seen as stand-in for these broader decisions