



Energy Supply
Technical Work Group
Teleconference Meeting #8

December 19, 2006



Today's Agenda

- Call to order
- Roll Call of TWG members and public
- Review and approval of summary of TWG call #7 (September 14, 2006) (on web)
- Review inputs to and results of revised NC GHG inventory & forecast
- Review draft results of ES-1, ES-2, ES-3&ES-9, and ES-6
- Review of tasks for detailed description of options
- Review of approach to ES-4, ES-5, ES-7, ES-8, and ES-10
- Call to the public
- Proposed agenda items for next meeting
- Announcements

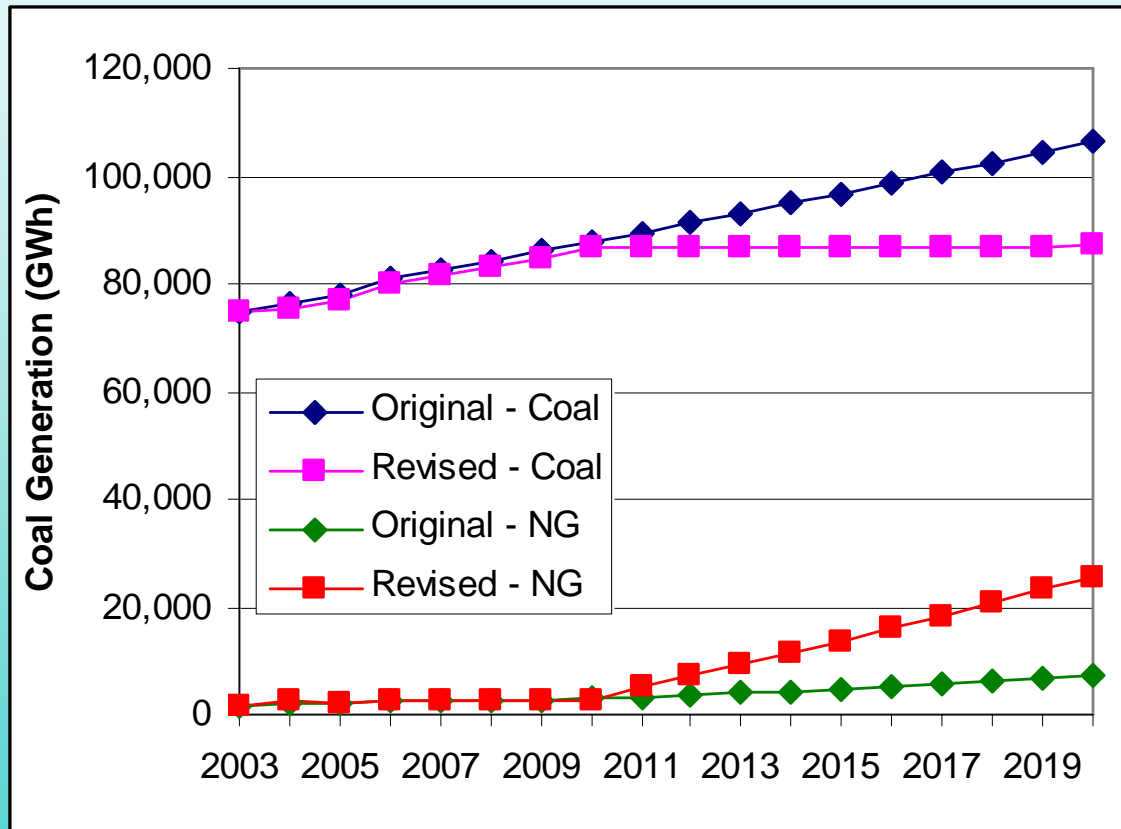
Communications with ES TWG since the 12 October 2006 CAPAG meeting

- Memo of 21 November 2006: Overview of Issues and Assumptions for the Estimation of GHG Emission Reductions from Electricity Policies
- Memo of 1 December 2006: Overview of Issues and Assumptions for the Estimation of GHG Emission Reductions from Electricity Policies
- Email of 5 December 2006: Revised GHG inventory and forecast based on TWG comments received
- Memo of 12 December 2006: Plan of action in response to TWG member inputs on the assumptions for the estimation of GHG emission reductions from electricity policies

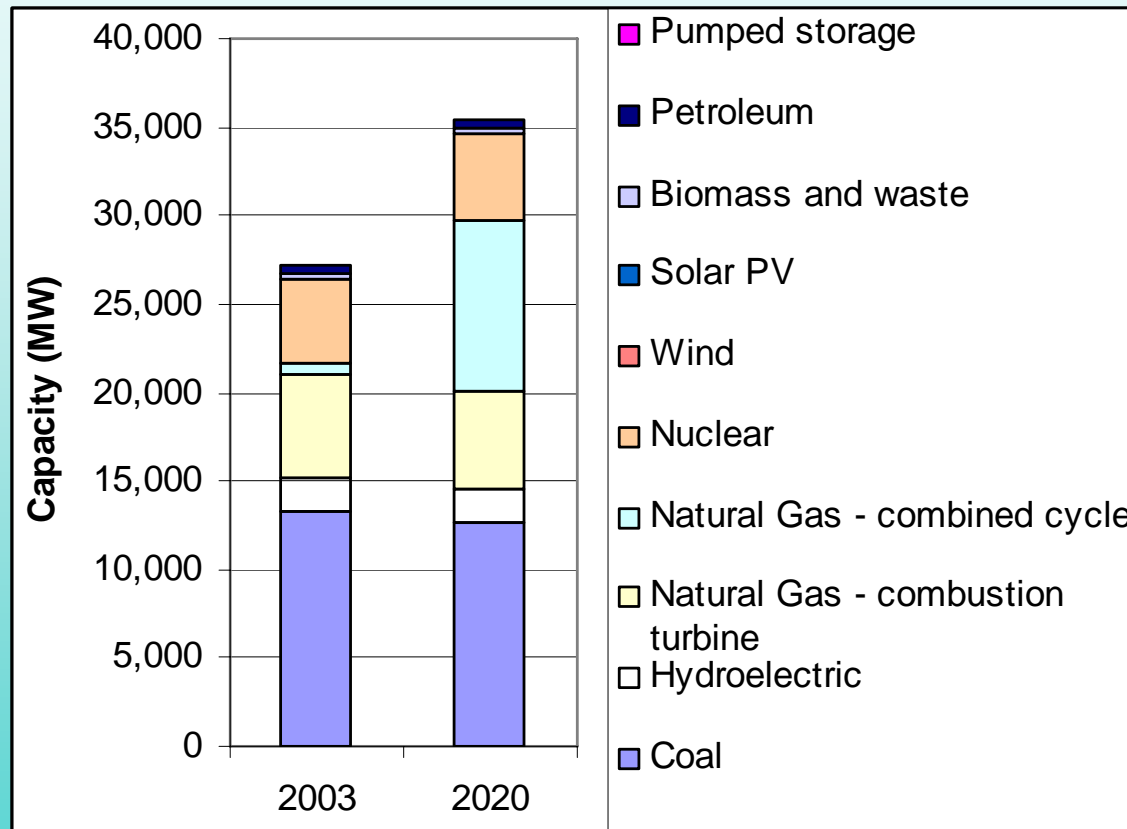
Summary of proposed changes to GHG inventory and forecast (I&F)

- See memo attached to email of 12 December 2006
- Generation mix
- Retirement schedule
- New coal- and gas-fired performance
- Dispatch of existing capacity
- NG-fired capacity shares (combustion turbines and combined cycle)
- Revised forecast in spreadsheet entitled: “Revised GHG forecast – version 1.0.XLS” (on web)

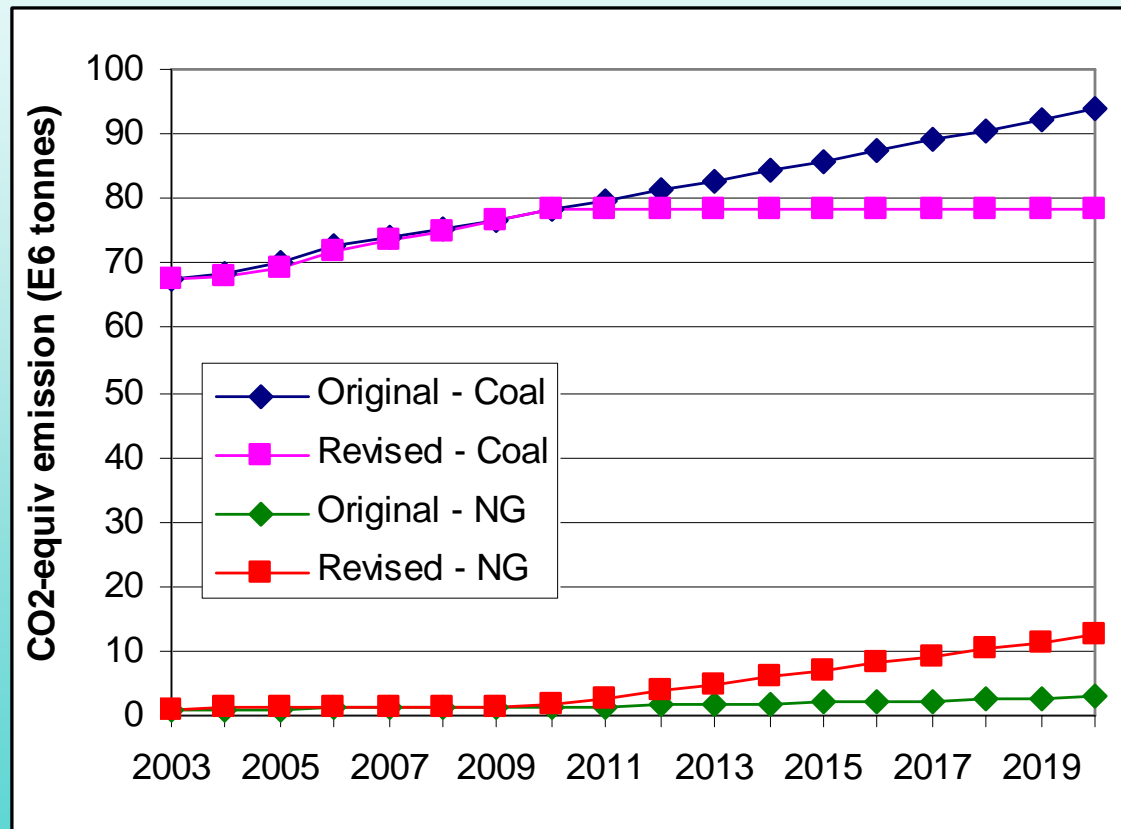
Revised I&F Results – Coal- and NG-fired Generation



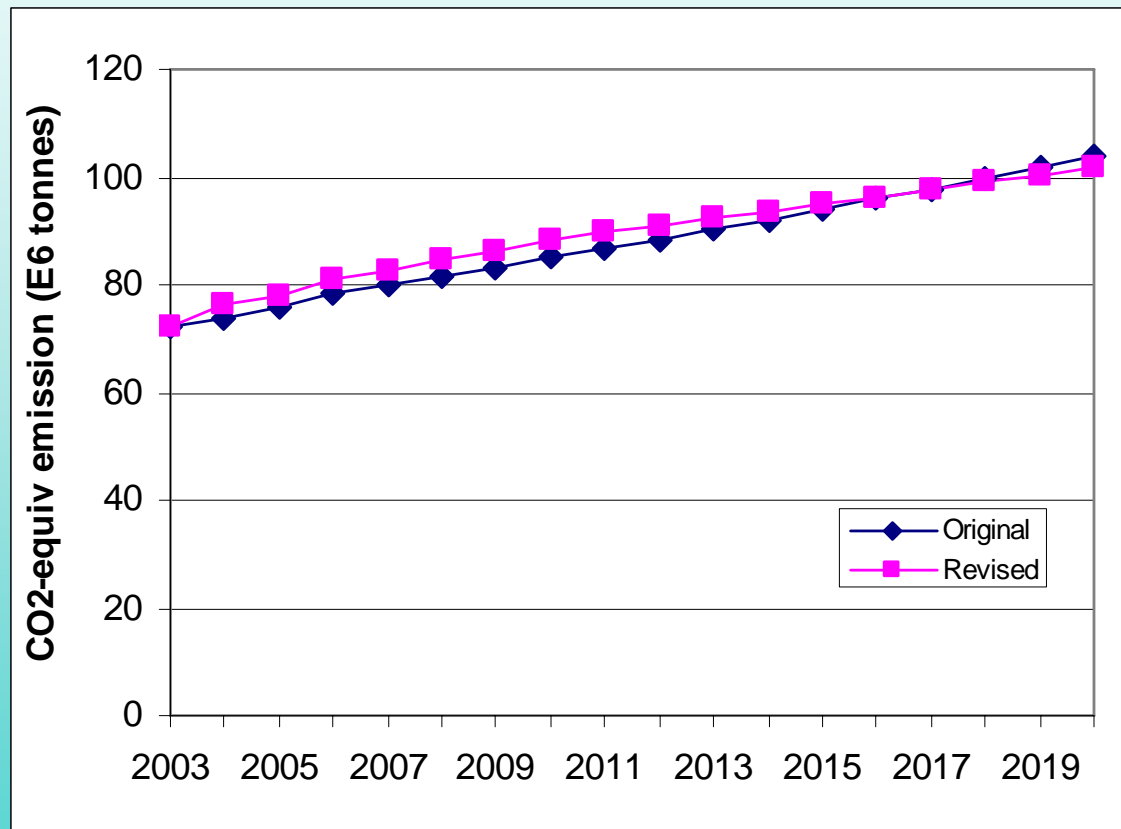
Revised I&F Results – Capacity



Revised I&F Results – Coal and NG CO2-equivalent emissions



Revised I&F Results – Total NG CO2-equivalent emissions



Summary of results of draft analyses completed thus far

- See spreadsheet entitled: “ES options – version 1.0.XLS” (on web)
- ES-1 (incentives for centralized renewables)
- ES-2 (EPS)
- ES-3 and ES-9 analyzed together (combined heat and power)
- ES-6 (coal IGCC with/without carbon capture and storage)

ES-1: Renewable Energy Incentives

- See worksheet ES-1
- Key assumptions
- Approach
- Results (by 2020)
 - 9.7 million tonnes CO₂-equivalent reduced
 - NPV = \$162 million
 - Cost of saved carbon = \$16.8 per tonne of CO₂-equivalent reduced

ES-2: Environmental Performance Standard

- See worksheet ES-2
- Key assumptions
- Approach
- Results (by 2020)
 - 195.3 million tonnes CO₂-equivalent reduced
 - NPV = \$291 million
 - Cost of saved carbon = \$1.5 per tonne of CO₂-equivalent reduced

ES-3 and ES-9: Combined Heat and Power

- See worksheet ES-3&9
- Key assumptions
- Approach
- Results (by 2020)
 - 20.5 million tonnes CO₂-equivalent reduced
 - NPV = \$465 million
 - Cost of saved carbon = \$22.6 per tonne of CO₂-equivalent reduced

ES-6: Coal Integrated Gasification Combined Cycle

- See worksheet ES-6
- Key assumptions
- Approach
- Results (by 2020)
 - 19.5 million tonnes CO₂-equivalent reduced
 - NPV = \$1,236 million
 - Cost of saved carbon = \$63.4 per tonne of CO₂-equivalent reduced

Proposed Approach to Remaining Options

- ES-4
- ES-5
- ES-7
- ES-8
- ES-10

Public Input, Announcements

Next TWG Call

- Agenda
 - Final revisions of GHG forecast
 - 2nd draft of analyses for ES-1, ES-2, ES-3&ES-9, and ES-6, as needed
 - 1st draft of analyses for ES-4, ES-5, ES-7, and ES-8, and ES-10
- Time and date