Global-Change Scenarios: their Development and Use US CCSP Synthesis and Assessment Product 2.1b

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Author team responses in italics:

1. Integration: I believe that the 3 main chapters could be better integrated: the scenarios reviewed in chapter 3 could more consistently be classified according to the framework developed in chapter 2; and the reviews in chapter 3 could be organized more systematically according to the issues identified in chapter 4. It may be worth considering a slightly rearranged order of the chapters: 1, 2, 4, 3 and 5

We agree, and have increased the integration of sections 3, 4, and 5 – as well as the explicitness of connections to the categorization in section 2 – in the reorganization.

2. The team could consider shortening some of the descriptive parts of chapter 3. At present it is long (50 pages) with the section on SRES being 15 pages alone. The question will be whether all of this material is functional to generating the conclusions in chapter 5.

We agree. We have shortened Section 3 considerably, in particular the discussion of SRES, and have moved the short cases to text boxes in relevant parts of section 4 as well as shortening them.

3. In the definition of user groups (section 2.6) seems to me to miss an important constituency – researchers and analysts. For instance, the main users of the SRES scenarios were climate modelers and climate impact analysts. I am also less convinced that one would be able to identify an "adaptation manager".

Analysts and researchers as users of scenarios are now treated systematically in the sections on scenarios used in assessments. We think that many decision-makers can quite reasonably be identified as "impacts and adaptation managers", and have provided several specific examples.

4. I believe that the discussion about probabilities in relation to socio-economic scenarios could be extended with reference to Berkhout and Hertin (2002, attached). Here the argument is made that complex and under-defined causality in social processes, innovation and reflexivity all play a role in making the future state of key parameters deeply uncertain, to the extent that attaching PDFs may be hard to justify.

The revised draft has added a discussion of reflexivity, principally in the context of representing decisions within scenarios, and makes reference to the arguments in the suggested paper. While attempting to assign probabilities poses many

difficulties and the issues raised by the reviewer make these even more difficult, we do not agree that they make any attempt to assign explicit probabilities inappropriate.

5. The questions of tautology (scenario assumptions pre-empting scenario outcomes) and circularity (for instance, is it correct to use a baseline scenario assuming no-policy, or should scenarios assume some policy even though this may a result of policy analysis using scenarios?) could be dealt with at slightly greater length (currently mentioned on p44, p61 and p121). They offer paradoxes which most scenario exercises need to deal with at some point. The report argues for a no-policy baseline for mitigation (p 121), but that may be highly artificial for the EU (and for certain US states) which is now implementing a whole range of climate policies.

The revisions deal with these issues in somewhat more detail, both in the discussion of consistency and integration in scenarios and in the discussion of representing decisions in scenarios. But while assuming a no-policy baseline when numerous policies are already enacted or committed is problematic, we believe it is problematic for relatively simple reasons – i.e., it is assuming something very unlikely or actually counter-factual – that do not much touch on the problem of tautology in scenarios. We find no logical incoherence in defining a baseline that assumes no incremental policies beyond sustaining those already adopted or committed (with some reasonable assumptions about implementation and compliance),