

COMMENTS ON DPSG'S PAPER

It appears that the paper " " has not received meticulous editing and rigorous refereeing. That is perhaps why it has achieved publication even though it is out-of-date, omits relevant recent references, wastes valuable journal space, shows sloppy editing¹, is replete with confusion, mistakes and methodological defects. Let us amplify these assertions.

The mind-set of the paper has not advanced beyond the first publication on the DEFENDUS approach to energy planning which was as far back as 1990. In fact, the 1997 two-part publication shows that there is far more to the approach than its 1990 application to the state of Karnataka. Unfortunately, Sen Gupta seems to be unaware of these advances. For example, whereas the penetration of efficiency improvements was described by straight line dissemination in 5 years, in all recent work and in the updated spreadsheets, it is considered to follow a logistic curve. An equally glaring omission is all reference to the detailed analysis of the Karnataka Power Sector published in 1997.

The paper is guilty of wasting valuable journal space. It includes all-India data that is irrelevant to subject indicated by the title. Thus, there is no need for Tables 3 and 4, and Figure 1 has simply been reproduced from the 1990 DEFENDUS publication. The logistic curve is standard stuff in textbooks and software packages. The paper also wastes space on far too superficial an account of Karnataka's Power Sector when deeper analyses have been published.

A major problem with Sen Gupta's paper is that it uses the terms: *scenario*, *projection* and *forecast* interchangeably as synonyms. Thus, the paper contains statements such as (P394 C2 para 2) "Projections tailored to scenarios", (P394 C2 para 5) "Scenario is most likely to be true", (P396 C1 para 1) 16 GWh is not a DEFENDUS projection, (P??? C? para ?) DEFENDUS projection is too optimistic. In fact, the DEFENDUS papers (both the 1990 and 1997 versions) have distinguished between these terms -- a *scenario* is an imagined sequence of events contingent upon the implementation of certain measures; a *projection* and a

¹ The reference in Page 401 Column 1 para 1 should be to Table 5 (not Table 3) and in Page 404 Column 1 Para 2 should be to Table 8 (not Table 6)

forecast

- 0.1 14th Power Survey when 15th PS is available
- 0.2 Balu and Gladys went back to the govet in mid-1996
- 0.3 P402 C2 Para 6 DKS and Lele
- 0.4 Why distorted presentation of the DEFENDUS approach instead of citing reference
- 0.5 (P396 C? para ?) Space wasted on end-use oriented stuff
- 0.6 14th PS Projections for India are irrelevant to the subject

1 Confusion

- 1.1 (P394 C2 para 2) "Projections tailored to scenarios"
- 1.2 (P394 C2 para 5) "Scenario is most likeley to be true"
- 1.3 (P396 C1 para 1) 16 GWh is not a DEFENDUS projectio
- 1.4 (P??? C? para ?) DEFENDUS projection is too optimistic
- 1.5 (P396 C2 para 2) No distinction between FE w/o EI and DEFENDUS w. IE

2 Misrepresentation

- 2.1 (P399 C1 para 3) It has been suggested
- 2.2 (P407 C2 para 1) Seems best chance
- 2.3 (P402 C1 para 4) No disagreement about 6000 MW
- 2.4 Not "Propose a cost-supply staircase" but "cost-supply staircase identifies the least-cost mix"
- 2.5 P407 C1 Para 6 -- "No such claim"
- 2.6 Projections and scenarios

3 Mistakes

- 3.1 (P394 C1 Table 1) Shortages should be based on true demand, not on PS projection
- 3.2 (P394 C1 para 2) Agricultural consumption based on KEB though it has been accepted that agricultural consumption has been exaggerated to suppress T & D losses
- 3.3 (P399 C1 para 2) CFL financing
- 3.4 (P401 C1 para 1) Table 5 KPCL's proposals are not based on IRP or any rational methodology
- 3.5 (P402 C1 para 1) Raichur V Rs 3.68 crores/MW
- 3.6 (P402 C2 para 2) DPSG implies that there are no vested interests in support of large dams
- 3.7 (P402 C2 para 3) "clear decline"
- 3.8 No difference between ENSWORLD and DEFENDUS

- 3.9 DEFENDUS Scenarios are not projections
- 3.10 Figure 5 (?) is in terms of current costs whereas all the costs in the DEFENDUS approach are in constant Rs

4 Methodological blunders

- 4.1 (P398 C1 para 3) Curious that LCP is not being adopted. Something is obviously wrong somewhere. Proposals have not made a dent.
- 4.2 Curious that DPSG's idea has not been adopted
- 4.3 Barrier analysis for all options not only conservation options
- 4.4 If LCP approach is accepted, then the case for Hydel must be made on the basis that it is part of the LCP mix
- 4.5 (P400 C2 para 1 and 3) All options in the least-cost mix must be started simultaneously in base year (cf. time-supply curve) ; cost-supply curve does not suggest time sequenmce for starting commencement of options
- 4.6 Re: costs of conventional centralized technologies are stable because of their efficiencys have saturated; however, their costs can increase to take into account components that were hitherto ignored (e.g., environmental costs)
- 4.7 But costs of non-conventional technologies can decrease because of learning; this is taken care off by future costing.
- 4.8 (P401 C? P?) What fraction of demand met by conservation and whether bulk power addition is essential should come from mix, not ex cathedra
- 4.9 (P400 C1 para 2) Boost centralized generation by decreasing conservation potential
- 4.10 Transparency imp rather than ex cathedra statements re extravagance
- 4.11 (P405 C2 Figure 7) Insignificant only when denominator is total forest (incl. degraded fores) but what should be denominator is "prime forest"