Response to Two Key Issues Raised in the CalSim II Review Report

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Two Key Issues

1. "Groundwater resources are assumed infinite, i.e., there is no limit to groundwater pumping"

2. "Overestimates water deliveries to SWP and CVP contractors"

Response to Key Issue: "Groundwater resources are assumed infinite, i.e., there is no limit to groundwater pumping"

- In CALSIM II agricultural and urban water demands in the Sacramento Valley are based on Bulletin 160 land use projections, and are limited by contractual constraints
- Demands are met - in order - by local water supplies, minimum ground water pumping, surface water diversion, and then additional ground water pumping
- Ground water is only used to meet demands in overlying areas
- There are no ground water exports

- A CALSIM II simulation study will abort if:
  - Demands
  - Natural and artificial recharge
  - Availability of surface water
  - physical and operational constraints of the system to store and transmit water

  collectively result in a physically infeasible requirement for ground water pumping
- Ground water pumping is not an infinite source in CALSIM II

Response to Key Issue:

"Model overestimates water deliveries to SWP and CVP contractors"

CalSim II Model SWP-CVP South-of-Delta Demand Assumptions

- Study Period Water Years 1974-1998
- Annual SWP demands were assumed variable
  - In wet and above-normal years set equal to actual historical deliveries
  - For all other year types set equal to historical entitlement requests
- Annual CVP demands were assumed fixed at the maximum contract amount and did not vary year to year
- No Drought Water Bank or other non-project water assumed in the model

Figure 1
SWP South of Delta Average Deliveries

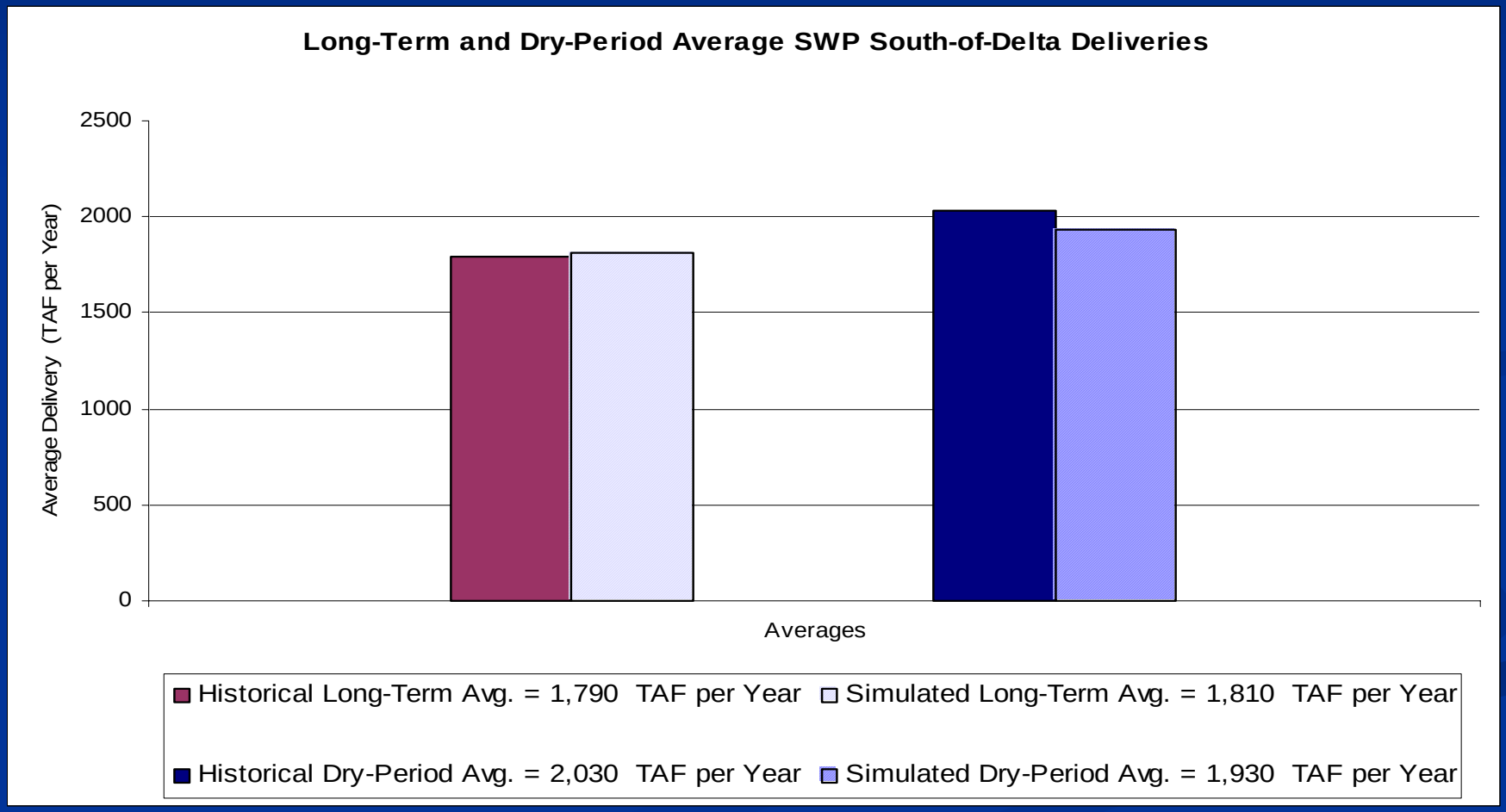

Figure 2
SWP South-of-Delta Table A Deliveries (1975-1997)

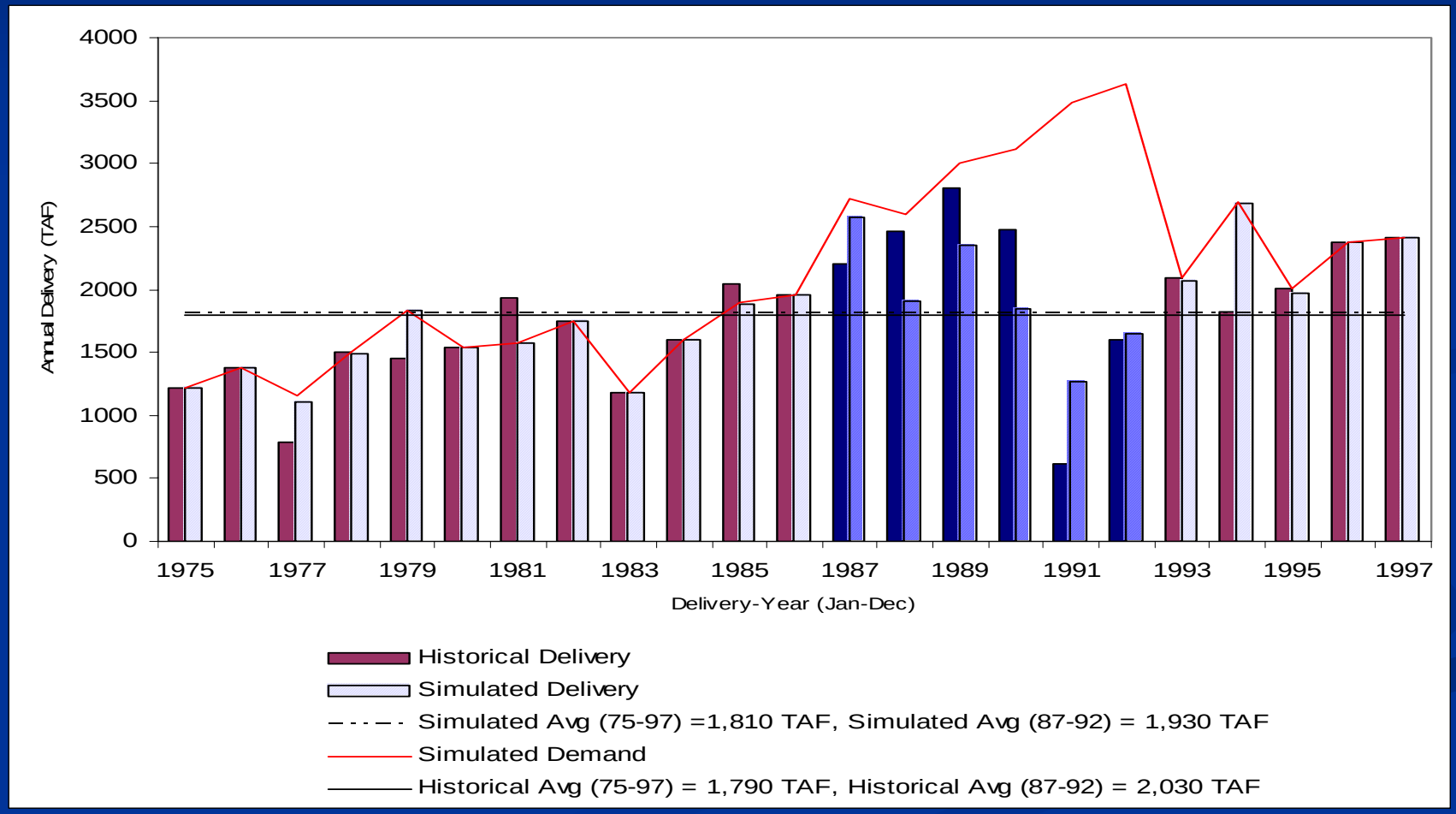

Figure 3
EOM Storage in SWP Reservoirs (March 1987- December 1992)

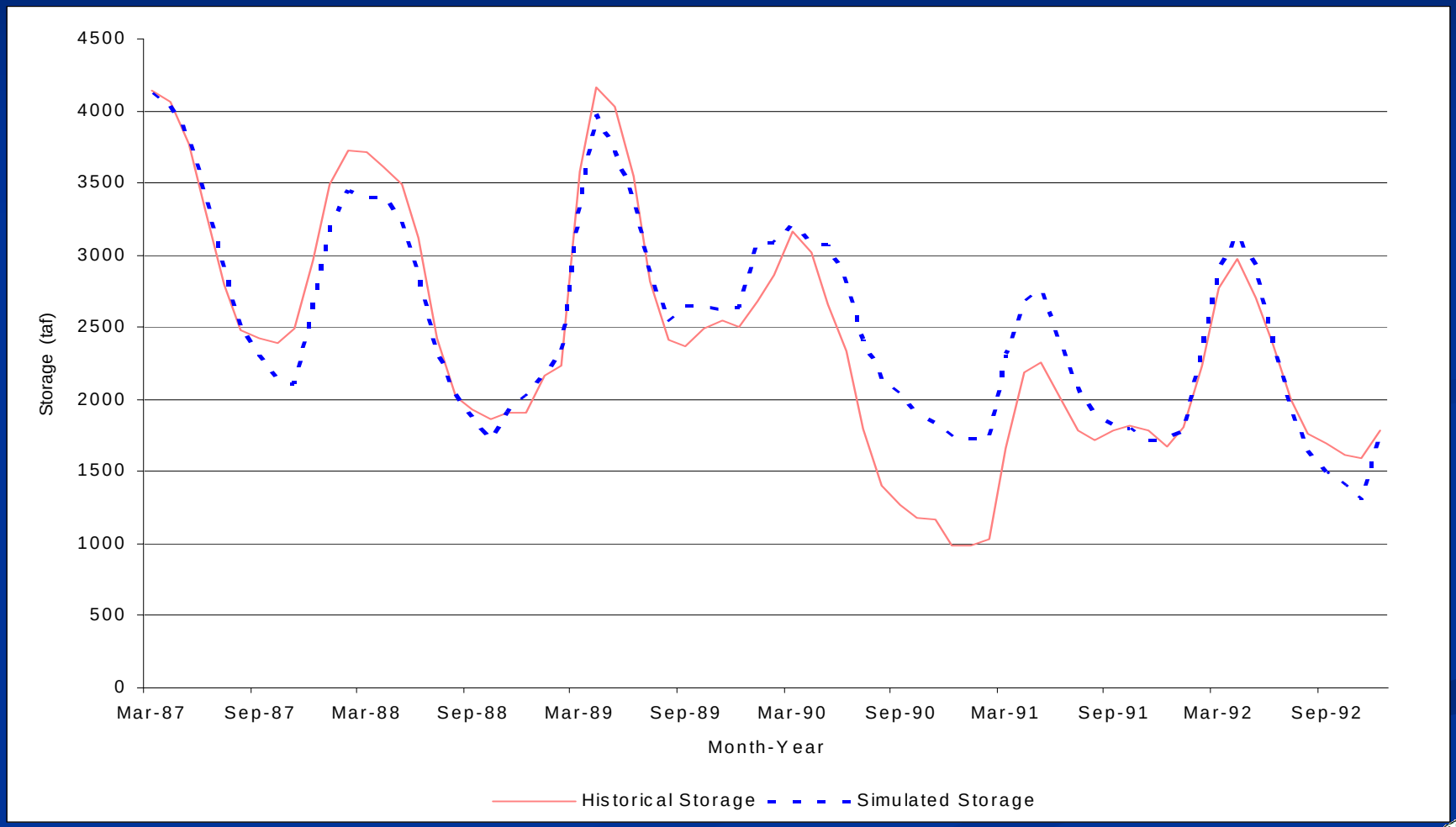

Figure 4
CVP South of Delta Average Deliveries

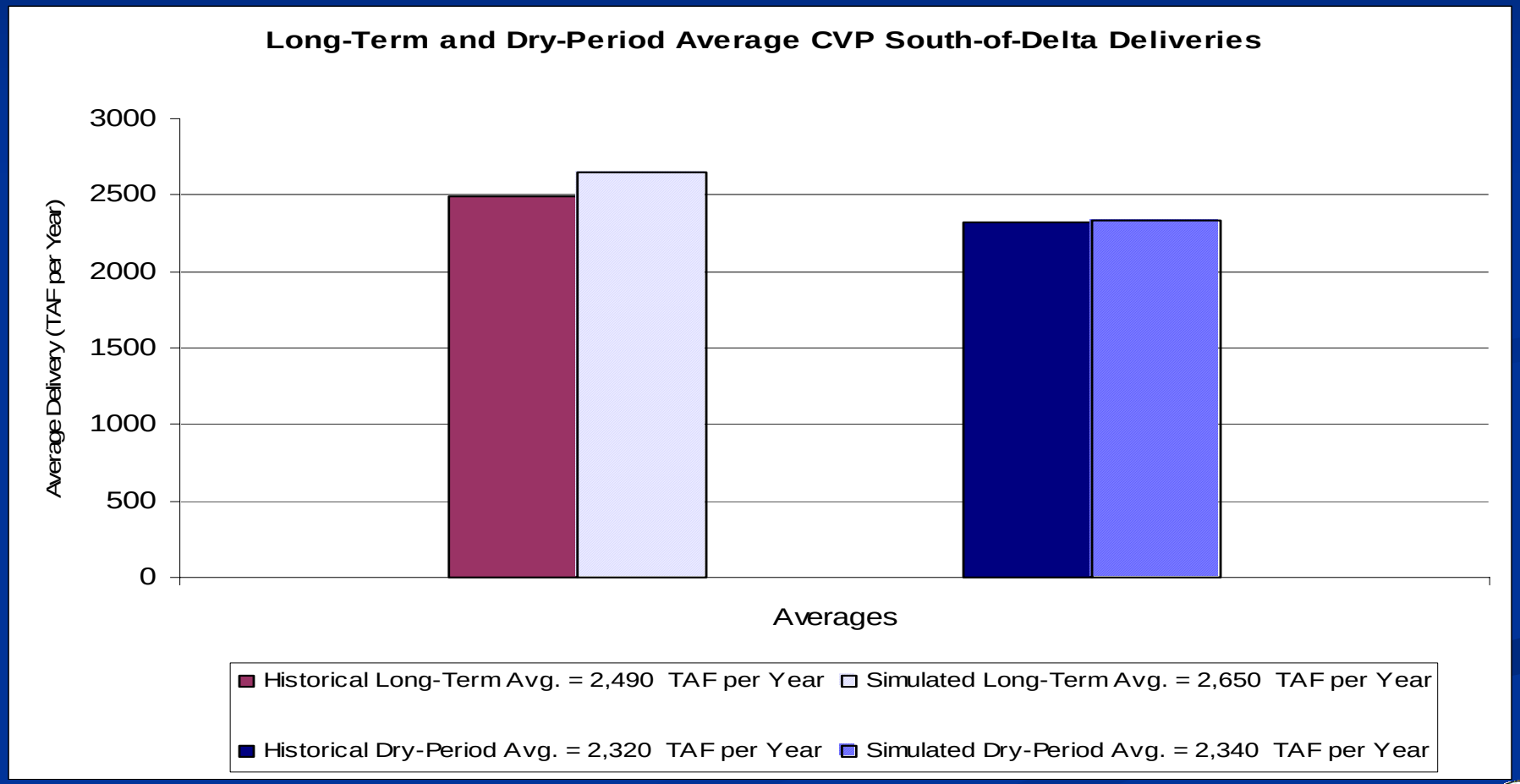

Figure 5
CVP South-of-Delta Deliveries (1982-1997)

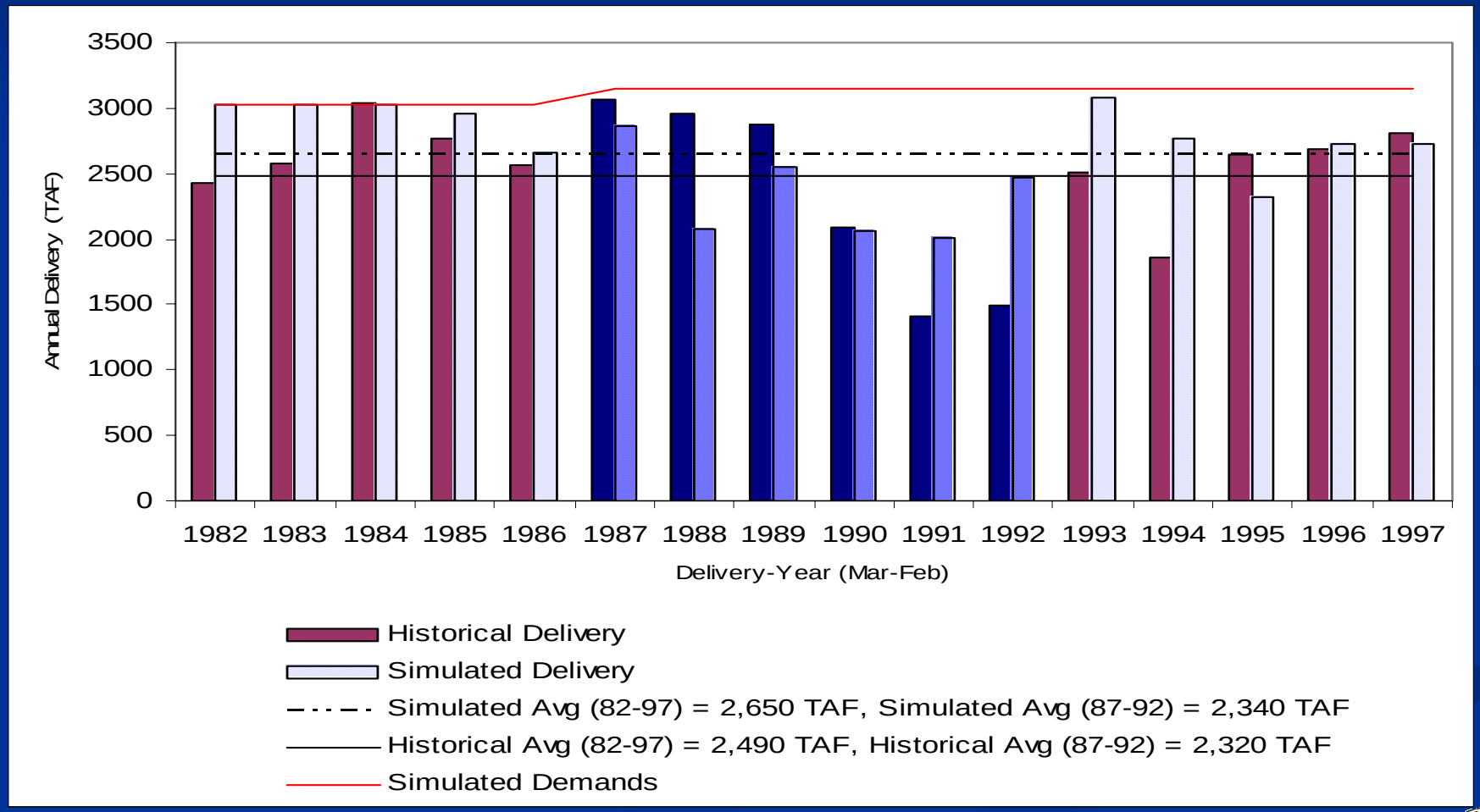
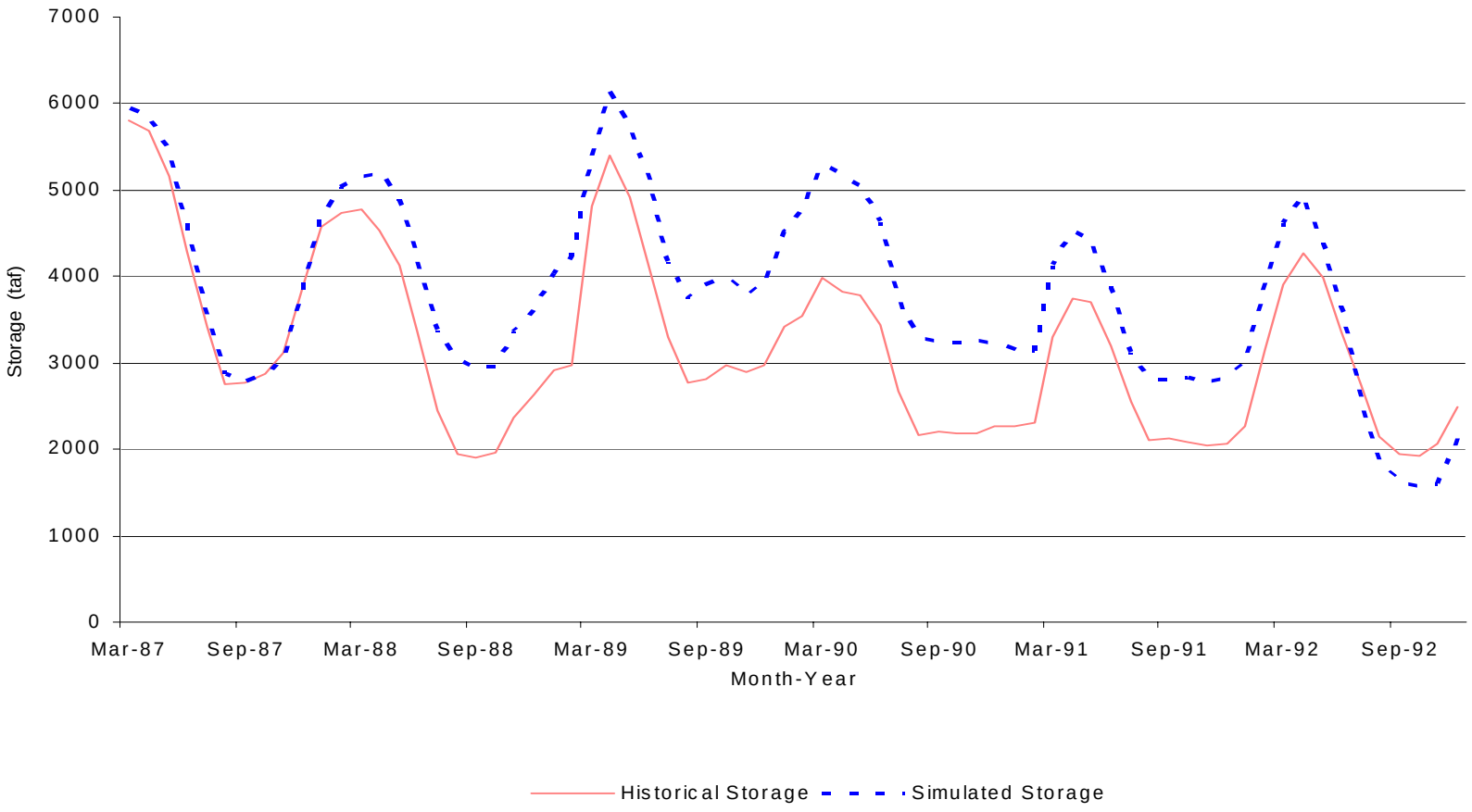
Figure 6
EOM Storage in CVP Reservoirs (March 1987- December 1992)