Inventory of Reclamation Facilities with Water Surface Storage Studies with Hydropower Components

Report to Congress Implementing Provisions of Section 1840 of the Energy Policy Act of 2005 (Public Law 109-58)

http://www.usbr.gov/power/data/sec1840.pdf

- This report complies with Section 1840 of the Energy Policy Act of 2005 requiring the Secretary of the Interior, acting through the Bureau of Reclamation, to develop a report “identifying and describing the status of potential hydropower facilities included in water surface storage studies undertaken by the Secretary for projects that have not been completed or authorized for construction” since 1939.
- The report contains no recommendations. However, it does serve as a useful reference tool for understanding the magnitude and scope of historical study activities in specific locations.

Potential Hydroelectric Development at Existing Facilities for Section 1834 of the Energy Act of 2005

http://www.usbr.gov/power/data/1834/Sec1834_EPA.pdf

- There is also limited potential for increased power generation by using flow releases that may be adopted for environmental purposes but do not conform to the original design of outlet works. An example is the periodic flushing flows released from Glen Canyon Dam that simulate high spring runoff flows.
- All other things being equal, hydroelectric facilities become less expensive per unit of generation as they become larger. The most ideal sites have long since been developed, and few sites that can meet the previously mentioned categories still exist on federal facilities.
- Critical to evaluating a hydroelectric site is to not just consider the site in isolation but rather to consider the site comprehensively with respect to its physical, hydrological, sociological, environmental, regulatory, and economic factors…Recent biological opinions have resulted in decreased generation and load following capability at Reclamation's Glen Canyon Dam as well as many of the USACE's dams on the lower Columbia River.