

OTTER TAIL POWER COMPANY  
Docket No: EL16-020

Response to: South Dakota Public Utilities Commission  
Analyst: SDPUC Staff  
Date Received: 11/01/2016  
Date Due: 11/11/2016  
Date of Response: 11/09/2016  
Responding Witness: Jason A. Grenier, Manager Market Planning - (218) 739-8639

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Information Request:

Please provide the discount rate(s) used in the DSMore benefit/cost models. Further, it appears that different discount rates were used for certain tests. Please explain how the discount rates were determined.

Attachments: 0

Response:

All discount rate calculations are consistent with methods Otter Tail uses in calculating cost-effectiveness in our Minnesota Conservation Improvement Programs. The basis for discount rates used was developed by the Minnesota Department of Commerce's Division of Energy Resources.

The Utility Discount Rate and the Ratepayer Impact Measure Discount Rate are Otter Tail's weighted cost of capital from our most recent South Dakota rate case of 8.50 percent. It is used to value, in current dollars, the future stream of internal benefits and costs resulting from a utility conservation investment.

The Societal Discount Rate is the rate used to discount the future stream of benefits resulting from avoided environmental damage. In South Dakota, Otter Tail excludes environmental externalities from the Societal test. The Societal Discount Rate is equal to the United States Department of the Treasury's 20-year Constant Maturity (CMT) Rate from March 1st in the year the Triennial is filed. On March 1, 2016, the rate was 2.28 percent.

The Participant Discount Rate for residential customers is the Societal Discount Rate of 2.28 percent. Such a discount rate would reflect a residential customer's likely opportunity costs. The Participant Discount Rate for commercial and industrial customers is the Utility Discount Rate. The rate represents an attempt to reflect a reasonable estimate of a business customer's opportunity costs.

In its initial filing in this docket, Otter Tail used a blended rate of 8.50 percent and 2.28 percent to calculate the Total Resource Cost (TRC) Discount Rate. The weighting of the rate was based on the level of administrative costs versus participant costs. Otter Tail did not intend to file the 2017-2019 South Dakota EEP Triennial with the blended discount rate. The Total Resource Cost Discount Rate should use the 2.28 percent rate, consistent with the Societal test. Since the Societal test excludes environmental externalities in South Dakota, it matches the TRC test results for each program. Otter Tail has included an updated Appendix A showing the results of all cost tests in SD-PUC-02-06.