

Financial Analysis for NOS Reform

July 19, 2012



Objectives

- Review and discuss scope of CIFP.
- Review and discuss inputs and assumptions for the CIFA.

Definitions

- CIFP (Commercial Infrastructure Financial Policy)
 - Purpose: establish the financial policy for financial analysis.
 - The policy is documented at:
http://transmission.bpa.gov/Customer_Forum/open_season_2009/CIFA_Metrics_11_19_09.pdf

- CIFA (Commercial Infrastructure Financial Analysis)
 - Purpose: Financial model that includes the projected revenue, deferrals, capital and O & M of the projects and any deferred project savings. Used to analyze project incremental rate effects and Net Present Value
 - The model was sent out to customers and is located at:
http://transmission.bpa.gov/customer_forum/nos_gi_reform/NOS_CIFAModel_with2008-10Inputs.xls

- PFA (Preliminary Financial Analysis)
 - New addition to NOS
 - Purpose: Provide early look at potential rate pressure and cost per MW based on cluster study results
 - Provide an early “reality check” for NOS participants.

- REBA (Regional Economic Benefits Analysis)
 - Purpose: Complete an analysis using WECC base case that reviews the WECC region to determine the production cost benefits that may or may not be realized due to projects included in the region.
 - A copy of the 2008 analysis is located at:
http://transmission.bpa.gov/Customer_Forum/open_season/docs/BPA%202008%20Network%20Open%20Season%20-%20CPS%20Report%20Final.pdf

Summary of NOS Financial Analyses

| Decription | Purpose | Where in the Process in the Past | Where in the Process Currently Proposed |
|--------------------------------|--|---|--|
| CIFP | Financial Policy for Financial Analysis | Regional collaboration prior to the start of the 2008 NOS | Develop prior to start of NOS |
| CIFA | Financial Analysis for Rolled in Rates | Informed the Rolled in Rates determination after the cluster study and prior to NEPA. 7 to 8 months into NOS process. | Informs the Rolled in Rates determination after the cluster study and after NEPA. 3 to 5 years into NOS process. |
| REBA | Regional Economic Benefits | Informed the Rolled in Rates determination after the cluster study and prior to NEPA. 7 to 8 months into NOS process. | Informs several parts of NOS pre-NOS assumption development to Cluster Study to final Rolled in Rates determination. |
| Preliminary Financial Analysis | Preliminary Financial Analysis to give indication of rate pressure | N/A | Conducted after Cluster Study but prior to NEPA. 9 months into NOS process. |

Proposed PFA Approaches

- Provide # of MW needed in order to be a rolled in rates.
- Provide preliminary rate pressure of all TSRs used in the cluster study.
- Use of both approaches would require more time for analysis – expect 90 days (currently 30 days).

CIFP Recap

- BPA will evaluate the business case for construction of the new facilities that may be required to provide service to those who sign Precedent Service Transmission Agreements in the Network Open Season process.
- The evaluation considers several factors, including project costs, revenue from subscription to the project, expected revenue from future uses, reliability benefits, and other economic benefits of the project.
- If the net present value of these factors is positive (which indicates that benefits are greater than costs), the project should move forward at rolled-in rates.

CIFA Assumptions

- Rates
 - Discount Rate = 9%
 - Borrowing Rate = 6.97%
 - Construction inflation rate = 1.7%
 - PTP inflation rate = 1%, used on the PTP rate
- Overhead Loadings
 - For the NPV calculation an incremental loading cost of \$2 millions per project per year of construction
 - For the embedded rate calculation the average IPR forecasted composite loading percentage of 23% is being used.
- Embedded rate calculation
 - Current \$6.0 million = 1% rate pressure, does not inflate over time.
 - Rule of thumb is divided into incremental costs from repayment assumptions by year.
 - Average rate calculations start averaging the first year the project (or if a cluster the first year that ALL projects) are energized and average 5, 10, and 20 years subsequent to energization.
- Subscriptions
 - Base PTP rate = 1.298\$/kw-mo, used to calculate subscription revenues.
 - Subscriptions of 5 years and over are assumed to roll over indefinitely

CIFA Assumptions: What We Heard from Customers

- Include transmission credits in analysis
 - All analysis since Sept 2011 has included transmission credits and will continued to be included in the analysis.
- Don't assume roll over of service
 - We currently assume all customers with roll over rights will exercise their roll over rights.
 - Currently our experience has shown that 95% of the customers with roll over rights have exercised this right to roll over.
 - Sensitivity based on historical rollover information is calculated and presented with the rate pressure output, however they are not included in the deterministic NPV or rate pressure calculation
 - Should we assume customers will not exercise their roll over rights and only take service for the term of their request?
- Assume some default
 - We currently provide a sensitivity which assumes 15% of the customers will default. (In the 2010 CIFA risk we assumed customer specific default probabilities based on Standard & Poors credit ratings)
 - Should we assume higher default?

CIFA Assumptions: What We Heard from Customers

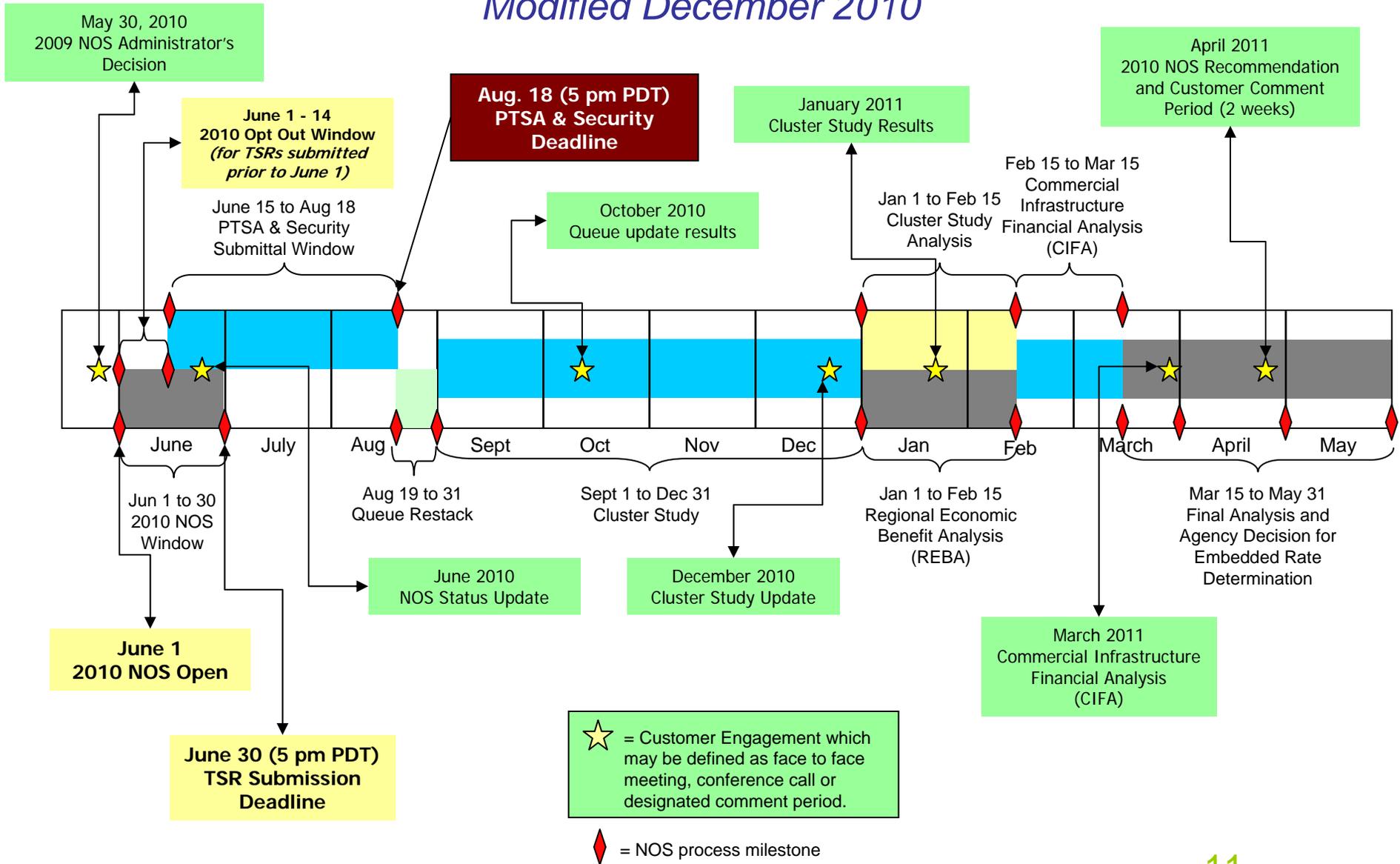
- Assume a range of capital spending
 - Currently we do a sensitivity of capital spending where vary the capital spending 20-30% higher and lower than point estimate.
 - Is there something else that is needed?
- Assume deferrals
 - Currently we assume deferrals based on our current knowledge based on feedback from Account Executives and Customer Service Engineers.
 - Should we require customers to provide additional information (such as GI information) to allow for better-informed forecast of deferrals?
- What is assumed for capital
 - Currently we assume third party financing.
 - Should we assume a different scenario?

Next Steps

- Customers welcome to provide feedback and input on:
 - What financial analysis is needed at key decision points in the proposed NOS model.
 - Should CIFP be modified? How?
 - What additional assumptions should be made in financial analysis?
- Future meetings will be set up to include discussions on REBA and how those results are incorporated into financial analysis.
- Comments should be submitted to techforum@bpa.gov.

2010 Network Open Season Roadmap & Timeline

Modified December 2010



Preliminary Future State of NOS Model

DRAFT - DRAFT

June 13, 2012

