

# **BP-14 Transmission Pre-Rate Case**

July 25, 2012



# Agenda

- Rates Follow-Up Items Check List
- Load Forecast
- Sales Forecast
- Large Generation Interconnection Agreement (LGIA) Credits
- Segmented Revenue Requirement



# **Rates Workshop Follow Up Items**



# Rates Follow-Up Items Checklist

- BPA is providing customers with a list of the follow-up items captured at past BP-14 Pre-Rate Case workshops.
- If BPA has missed a follow-up item, email it to [techforum@bpa.gov](mailto:techforum@bpa.gov) with “Rates Follow-Up” in the subject heading.



|    | A   | B   | C              |
|----|---|---|----------------|
| #  | Customer Request  | BPA Response  | Date Completed |
| 1  | <b>6/27/12 - Transmission pre-rate case workshop follow-up items:</b>   |   |                |
| 2  | Resend customers the Montana Intertie analysis.   | See 7/10/12 Tech Forum  | 7/10/12        |
| 3  | Provide a list of transmission investments below 100 kV.  | See 7/6/12 Tech Forum   | 7/6/12         |
| 4  | <b>6/13/12 - Transmission pre-rate case workshop follow-up items:</b>   |   |                |
| 5  | Provide the names of the customers who are served by 34.5 kV facilities.  | See 6/19/12 Tech Forum.   | 6/19/12        |
| 6  | On 6/7/12 Northern Wasco County PUD requested information on load diversity and coincidental peaks.   | See 6/15/12 Tech Forum  | 6/15/12        |
| 7  | <b>5/23/12 - Transmission pre-rate case workshop follow-up items:</b>   |   |                |
| 8  | In the Extensions for Commencement of Service (Slide 5), reflect the assumptions about deferrals and add the impact of non-cash revenues. If this is an ongoing problem for the next 8 years, extend the analysis past 2015. Break this out by NOS project. | A follow-up to this request was sent out via Tech Forum (See Reservation Fee Analysis Follow-Up). | 6/15/12        |
| 9  | Provide information on MW on revenue loss, additional years, rates and tariff, and how they mesh. Also, show short-term sales and how they are included or offset by lost revenues. List assumptions (including the number of deferrals assumed).           | A follow-up to this request was sent via Tech Forum (See Reservation Fee Analysis Follow-Up).     | 6/15/12        |
| 10 | Provide an update on the status of Competitions.  | TBD   | TBD            |
| 11 | Provide a hypothetical substation and walkthrough how you allocate facilities.  | See 6/13/12 workshop materials.   | 6/13/12        |



|    | A  | B  | C              |
|----|--|--|----------------|
| #  | Customer Request   | BPA Response   | Date Completed |
| 1  | <b>5/4/12 - Comment deadline for staff recommendation on network cost allocation follow-up:</b>                  |  |                |
| 2  | Respond to load questions submitted by Northern Wasco County PUD.  | Posted on the BP-14 Pre-Rate Proceeding Meetings & Workshops page.   | 5/8/12         |
| 3  | <b>4/12/12 - COSA workshop follow-up items:</b>  |  |                |
| 4  | BPA agreed to provide an updated version of the TRAM to include 1 NCP and 12 NCP.                                | Posted on the BP-14 Pre-Rate Proceeding Meetings & Workshops page.   | 4/18/12        |
| 5  | BPA agreed to send out the supporting documentation for the load to support the NT cost allocation alternatives. | An Excel file was provided with information on Network integration coincident with customer peak.                                    | 4/16/12        |
| 6  | <b>3/7/12 - COSA workshop follow-up items:</b>   |  |                |
| 7  | Provide supplemental information on the Revenue Requirement model.   | BPA posted the IPR Closeout Expense Programs for FY 12 and FY 13, TS Plant Investment and BPA Transmission General Plant Investment. | 3/21/12        |
| 8  | Provide the segmented Revenue Requirement worksheet (the info to create Table 1).                                | BPA posted the TR-12 Final Rate Study Tables (See BP-14 Pre-Rate Proceeding Meetings & Workshops page).                              | 3/15/12        |
| 9  | Customers requested information on the forecasted revenues from penalties.                                       | Discussed during revenue portion of Pre-Rate Case Workshop on 7/25/12.   | TBD            |
| 10 | <b>2/8/12 - COSA workshop follow-up items:</b>   |  |                |
| 11 | Distribute COSA/IM process timelines.  | See 2/22/12 Tech Forum.  | 2/22/12        |
| 12 | Provide Transmission Rate Analysis Model.  | See 2/22/12 Tech Forum.  | 2/22/12        |
| 13 | Provide clarification on modeling Available Transfer Capability/Available Flowgate Capability in base cases.     | See 2/22/12 Tech Forum.  | 2/22/12        |



|    | A  | B   | C                     |
|----|--|---|-----------------------|
| 1  | <b>Customer Request</b>  | <b>BPA Response</b>   | <b>Date Completed</b> |
| 2  | <b>1/11/12 - COSA workshop follow-up:</b>  |   |                       |
| 3  | Host a workshop on the treatment of LGIA as a reason for rate increases.   | Discussed during Revenue portion of Pre-Rate Case Workshop on 7/25/12.        | TBD                   |
| 4  | Have someone from load forecasting available at a workshop.  | See 2/8/12 workshop materials.  | 2/8/12                |
| 5  | In the Network Revenue Summary (12 CP Assumption) slide, show the effects of the settlement using reserves.                                    | Will be discussed during revenue portion of Pre-Rate Case Workshop on 8/8/12. | TBD                   |
| 6  | Host a follow up workshop on CP numbers after customers have had a chance to analyze them.   | See 2/8/12 workshop materials.  | 2/8/12                |
| 7  | Provide a 5 year historical look at load data by month, year and product.  | See 2/8/12 workshop materials.  | 2/8/12                |
| 8  | Provide clarification on the <a href="#">IM Analysis Summary</a> .   | BPA provided an updated IM Roll-In Analysis Q&A document.                     | 1/9/12                |
| 9  | <b>12/5/12 - COSA and Montana Intertie workshop follow-up:</b>   |   |                       |
| 10 | Provide an updated analysis on the rate impacts of rolling in the costs of various portions of the Eastern Intertie (BPA's portion of the IM). | BPA provided customers the updated rate impact analysis.                      | 12/19/11              |
| 11 | Review the transmission rates calculation process as it is currently performed.  | BPA provided a presentation at the 12/5/12 COSA workshop.                     | 12/5/11               |



# Load Forecasting





# Load Forecasting Goals

- Customer Services Load Forecasting Group (KSL) established in 2007.
- Same forecast basis and assumptions are used for forecasts provided to Power and to Transmission.
- Consistency for all planning processes.
  - in accuracy levels.
  - in methods.
  - in assumptions.
- Goal is seamless integration of planning from next day to the next 20 years forecasted accurately.



# Load Forecasting Process

- Bottom up approach where each customer is individually forecasted.
- Statistical based models using 10 or more years of historical data.
- Known changes identified through customer visits.
- Known changes are for specific off trend customer growth:
  - New large industrial or commercial loads.
  - New large subdivision additions.
- Economic assumptions obtained from Global Insight.
- Numerous elements are forecasted from the same assumptions (i.e. kWh, customer peak, GSP, TSP, CA peak).
- Updates prepared annually followed with quarterly refinement as necessary.
- Final forecast reviewed by customer, AE, and other interested parties.



# Load Forecasting Assumptions

- Normal weather conditions exist (34-year average value).
- Continuation of recent trends with known changes identified through customer visits.
  - Precious metals production (increases).
  - Federal stimulus funding (increases but slowing).
  - Mill closures (decreases).
  - Data warehouse additions (increases).
- Continue to plan on flat or little growth in sales through mid CY13 when we expect the economy to have enough steam to show sustainable growth - much lower than the average growth rate of 3.7% historically FY03 to FY09.



# Sales Forecast



# FY 2014-2015 Rate Case Long Term Network Sales Forecast Assumptions

- Formula Power Transmission (FPT) and Integration of Resources (IR) are expected to decline during the rate period. Expiration of contracts is expected to reduce the average monthly IR demand during the rate period by 768 MW and the average FTP Demand by 502 MW.
- Point-to-Point Long Term (PTP LT) sales increase primarily due to:
  - Expected conversion of expiring grandfather contracts (increase monthly average demand by 452 MW due to FPT and 564 MW due to IR conversions).
  - Customers taking service granted through NOS for offers that have been confirmed and offers awaiting builds.

| NOS Project                          | In Service Date | Monthly Avg Demand During 14-15 Rate Period (MW) |                  |
|--------------------------------------|-----------------|--|------------------|
|                                      |                 | Increased Service                                | Deferred Service |
| No Build Required                    | N/A             | 39   | 279              |
| McNary-JohnDay                       | 3/1/2012        | 19   | 60               |
| Big Eddy-Knight                      | 1/1/2015*       | 300  | 846              |
| Central Ferry-LoMo                   | 1/1/2015*       | 38   | 38               |
| Central Ferry-LoMo & Big Eddy-Knight | 1/1/2015*       | 0  | 131              |

\*Forecast in service date based on information from Project Managers

- Network Integration (NT) sales are based on load forecasts produced by Agency Load Forecasting. Economic indicators suggest near-flat growth through mid 2013 before beginning sustainable growth. The NT growth rate through FY 2015 is approximately 1.4%, lower than a 3.7% historical basis.



# FY 2014-2015 Rate Case Long-Term Intertie Sales Forecast Assumptions

- Southern Intertie (IS) includes approximately 540 MW in AC and DC sales from the 4800 MW upgrade.
- Montana Intertie (IM) are expected to remain static (16 MW).



# FY 2014-2015 Rate Case Short-Term Sales Forecast Assumptions

- Short Term sales on the Network (PTP) are based on recent historical usage with adjustments to better reflect normal water conditions and price index spreads between Mid-Columbia (MIDC) and California (NP-15)
- Short Term sales on the Southern Intertie (IS) are based on historical trends of sales driven by price index spreads between Mid-Columbia (MIDC) and California (NP-15).



# FY 2014-2015 Rate Case Sales Forecast Network Segment – Long Term

|                            |  | (MegaWatts) |               |               |               |               |               |               |               |               |               |               |               |               |               |
|----------------------------|--|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (A)                        | (B)                                    | (C)         | (D)           | (E)           | (F)           | (G)           | (H)           | (I)           | (J)           | (K)           | (L)           | (M)           | (N)           | (O)           |               |
| Transmission Rate Schedule | MWs                                    | Oct         | Nov           | Dec           | Jan           | Feb           | Mar           | Apr           | May           | Jun           | Jul           | Aug           | Sep           | Annual        |               |
| 1                          | <b>Network</b>                         |             |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 2                          | <b>FY 2014</b>                         |             |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 3                          | Formula Power Transmission (FPT.1)     | m_cd        | 1,482         | 1,482         | 1,482         | 1,407         | 1,407         | 1,407         | 1,407         | 1,407         | 1,407         | 1,407         | 1,407         | 1,407         | 1,425         |
| 4                          | Formula Power Transmission (FPT.3)     | m_cd        | 66            | 76            | 87            | 87            | 79            | 73            | 69            | 68            | 63            | 65            | 67            | 66            | 72            |
| 5                          | Integration of Resources (IR)          | m_cd        | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 1,233         | 266           | 266           | 1,072         |
| 6                          | Point to Point (PTP)                   | m_cd        | 23,554        | 23,549        | 23,549        | 23,628        | 23,628        | 23,664        | 23,664        | 23,709        | 23,709        | 23,709        | 24,708        | 24,708        | 23,815        |
| 7                          | Network Transmission (NT)              | m_cp        | 6,168         | 6,952         | 7,927         | 7,163         | 7,005         | 6,370         | 5,885         | 5,633         | 5,571         | 6,331         | 6,069         | 5,478         | 6,379         |
| 8                          | <b>Subtotal FY 2014</b>                |             | <b>32,503</b> | <b>33,292</b> | <b>34,278</b> | <b>33,518</b> | <b>33,351</b> | <b>32,746</b> | <b>32,257</b> | <b>32,049</b> | <b>31,983</b> | <b>32,744</b> | <b>32,517</b> | <b>31,924</b> | <b>32,764</b> |
| 9                          | <b>FY 2015</b>                         |             |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 10                         | Formula Power Transmission (FPT.1)     | m_cd        | 917           | 917           | 917           | 717           | 717           | 717           | 717           | 717           | 117           | 117           | 117           | 117           | 567           |
| 11                         | Formula Power Transmission (FPT.3)     | m_cd        | 66            | 76            | 87            | 87            | 79            | 73            | 69            | 68            | 63            | 65            | 67            | 66            | 72            |
| 12                         | Integration of Resources (IR)          | m_cd        | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           | 266           |
| 13                         | Point to Point (PTP)                   | m_cd        | 25,198        | 25,153        | 25,203        | 26,308        | 26,308        | 26,308        | 26,308        | 26,353        | 26,353        | 26,353        | 26,417        | 26,617        | 26,073        |
| 14                         | Network Transmission (NT)              | m_cp        | 6,257         | 7,048         | 8,011         | 7,246         | 7,072         | 6,450         | 5,961         | 5,716         | 5,653         | 6,425         | 6,156         | 5,563         | 6,463         |
| 15                         | <b>Subtotal FY 2015</b>                |             | <b>32,704</b> | <b>33,460</b> | <b>34,484</b> | <b>34,624</b> | <b>34,442</b> | <b>33,814</b> | <b>33,320</b> | <b>33,120</b> | <b>32,452</b> | <b>33,225</b> | <b>33,023</b> | <b>32,628</b> | <b>33,441</b> |
| 16                         | <b>Network Average for Rate Period</b> |             |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 17                         | Formula Power Transmission (FPT)       | m_cd        | 1,265         | 1,275         | 1,286         | 1,149         | 1,141         | 1,135         | 1,131         | 1,130         | 825           | 827           | 829           | 828           | 1,068         |
| 18                         | Integration of Resources (IR)          | m_cd        | 750           | 750           | 750           | 750           | 750           | 750           | 750           | 750           | 750           | 750           | 266           | 266           | 669           |
| 19                         | Point to Point (PTP)                   | m_cd        | 24,376        | 24,351        | 24,376        | 24,968        | 24,968        | 24,986        | 24,986        | 25,031        | 25,031        | 25,031        | 25,562        | 25,662        | 24,944        |
| 20                         | Network Transmission (NT)              | m_cp        | 6,213         | 7,000         | 7,969         | 7,205         | 7,038         | 6,410         | 5,923         | 5,675         | 5,612         | 6,378         | 6,113         | 5,520         | 6,421         |
| 21                         | <b>Subtotal Network</b>                |             | <b>32,604</b> | <b>33,376</b> | <b>34,381</b> | <b>34,071</b> | <b>33,896</b> | <b>33,280</b> | <b>32,789</b> | <b>32,585</b> | <b>32,217</b> | <b>32,985</b> | <b>32,770</b> | <b>32,276</b> | <b>33,102</b> |





# FY 2014-2015 Rate Case Initial Sales Forecast Intertie Segment – Long Term

|                            |  | (MegaWatts) |       |       |       |       |       |       |       |       |       |       |       |        |
|----------------------------|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| (A)                        | (B)  | (C)         | (D)   | (E)   | (F)   | (G)   | (H)   | (I)   | (J)   | (K)   | (L)   | (M)   | (N)   | (O)    |
| Transmission Rate Schedule | MWs  | Oct         | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Annual |
| 1                          | <b>Southern Intertie</b>                         |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 2                          | <b>FY 2014</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 3                          | Southern Intertie (IS)                           | m_cd        | 5,971 | 5,926 | 5,926 | 5,926 | 5,926 | 5,926 | 5,971 | 5,971 | 5,971 | 5,971 | 5,971 | 5,949  |
| 4                          | <b>FY 2015</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 5                          | Southern Intertie (IS)                           | m_cd        | 6,001 | 5,956 | 5,956 | 5,956 | 5,956 | 5,956 | 6,001 | 6,001 | 6,001 | 6,001 | 6,001 | 5,979  |
| 6                          | <b>Southern Intertie Average for Rate Period</b> |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 7                          | <b>Subtotal Southern Intertie (IS)</b>           | m_cd        | 5,986 | 5,941 | 5,941 | 5,941 | 5,941 | 5,941 | 5,986 | 5,986 | 5,986 | 5,986 | 5,986 | 5,964  |
| 8                          | <b>Montana Intertie</b>                          |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 9                          | <b>FY 2014</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 10                         | Montana Intertie (IM)                            | m_cd        | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16     |
| 11                         | <b>FY 2015</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |
| 12                         | Montana Intertie (IM)                            | m_cd        | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16     |



# FY 2014-2015 Rate Case Initial Sales Forecast Short-Term

| (A)                                    | (B)   | (C)        | (D)        | (E)        | (F)        | (G)        | (H)        | (I)         | (J)         | (K)         | (L)         | (M)        | (N)        | (O)         |
|--|-------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|------------|------------|-------------|
| Short-term Product                     | Units | Oct.       | Nov.       | Dec.       | Jan.       | Feb.       | Mar.       | Apr.        | May         | Jun.        | Jul.        | Aug.       | Sep.       | Annual      |
| 1 Days in Month                        |       | 31         | 30         | 31         | 31         | 28         | 31         | 30          | 31          | 30          | 31          | 31         | 30         |             |
| 2 <b>Network (PTP only short-term)</b> |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 3 <b>FY 2014 1/</b>                    |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 4 Monthly/Weekly/Daily Block1          | m_cd  | 7          | 8          | 76         | 144        | 34         | 244        | 268         | 576         | 835         | 557         | 26         | 20         | 233         |
| 5 Monthly/Weekly/Daily Block2          | m_cd  | 9          | 15         | 99         | 145        | 80         | 120        | 448         | 1,312       | 1,275       | 414         | 37         | 92         | 337         |
| 6 Hourly Firm                          | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 7 Hourly Nonfirm                       | m_cd  | 93         | 134        | 548        | 403        | 540        | 442        | 582         | 569         | 778         | 640         | 352        | 149        | 436         |
| 8 <b>Subtotal FY 2014</b>              | m_cd  | <b>108</b> | <b>157</b> | <b>724</b> | <b>693</b> | <b>654</b> | <b>806</b> | <b>1299</b> | <b>2457</b> | <b>2888</b> | <b>1610</b> | <b>414</b> | <b>260</b> | <b>1006</b> |
| 9 <b>FY 2015 1/</b>                    |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 10 Monthly/Weekly/Daily Block1         | m_cd  | 0          | 10         | 72         | 155        | 33         | 251        | 264         | 569         | 831         | 550         | 25         | 18         | 231         |
| 11 Monthly/Weekly/Daily Block2         | m_cd  | 0          | 20         | 93         | 157        | 79         | 123        | 442         | 1,303       | 1,272       | 408         | 35         | 86         | 335         |
| 12 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 13 Hourly Nonfirm                      | m_cd  | 88         | 147        | 562        | 429        | 554        | 464        | 579         | 573         | 800         | 640         | 364        | 151        | 446         |
| 14 <b>Subtotal FY 2015</b>             | m_cd  | <b>88</b>  | <b>177</b> | <b>728</b> | <b>742</b> | <b>666</b> | <b>839</b> | <b>1286</b> | <b>2445</b> | <b>2902</b> | <b>1598</b> | <b>424</b> | <b>255</b> | <b>1012</b> |
| 15 <b>Rate Period</b>                  |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 16 Monthly/Weekly/Daily Block1         | m_cd  | 3          | 9          | 74         | 150        | 33         | 248        | 266         | 573         | 833         | 553         | 25         | 19         | 232         |
| 17 Monthly/Weekly/Daily Block2         | m_cd  | 4          | 18         | 96         | 151        | 80         | 121        | 445         | 1,308       | 1,273       | 411         | 36         | 89         | 336         |
| 18 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 19 Hourly Nonfirm                      | m_cd  | 91         | 140        | 555        | 416        | 547        | 453        | 581         | 571         | 789         | 640         | 358        | 150        | 441         |
| 20 <b>Subtotal Rate Period</b>         | m_cd  | <b>98</b>  | <b>167</b> | <b>726</b> | <b>717</b> | <b>660</b> | <b>822</b> | <b>1292</b> | <b>2451</b> | <b>2895</b> | <b>1604</b> | <b>419</b> | <b>257</b> | <b>1009</b> |
| 21 Rate Design 2/                      | m_cd  | 199        | 325        | 1366       | 1235       | 1275       | 1420       | 2037        | 3308        | 4096        | 2530        | 823        | 430        | 1,587       |
| 22 <b>Southern Intertie</b>            |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 23 <b>FY 2014 1/</b>                   |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 24 Monthly/Weekly/Daily Block1         | m_cd  | 1          | 0          | 6          | 3          | 0          | 22         | 50          | 103         | 137         | 251         | 201        | 0          | 64          |
| 25 Monthly/Weekly/Daily Block2         | m_cd  | 0          | 0          | 0          | 20         | 38         | 57         | 58          | 75          | 83          | 119         | 83         | 0          | 44          |
| 26 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 27 Hourly Nonfirm                      | m_cd  | 28         | 30         | 23         | 29         | 18         | 52         | 108         | 143         | 302         | 172         | 56         | 55         | 85          |
| 28 <b>Subtotal FY 2014</b>             | m_cd  | <b>29</b>  | <b>30</b>  | <b>28</b>  | <b>51</b>  | <b>56</b>  | <b>131</b> | <b>216</b>  | <b>321</b>  | <b>522</b>  | <b>542</b>  | <b>340</b> | <b>55</b>  | <b>193</b>  |
| 29 <b>FY 2015 1/</b>                   |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 30 Monthly/Weekly/Daily Block1         | m_cd  | 1          | 0          | 6          | 3          | 0          | 25         | 47          | 103         | 137         | 250         | 203        | 0          | 65          |
| 31 Monthly/Weekly/Daily Block2         | m_cd  | 23         | 18         | 25         | 21         | 45         | 63         | 55          | 75          | 83          | 118         | 84         | 0          | 51          |
| 32 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 33 Hourly Nonfirm                      | m_cd  | 33         | 27         | 24         | 31         | 21         | 58         | 103         | 143         | 302         | 171         | 57         | 62         | 86          |
| 34 <b>Subtotal FY 2015</b>             | m_cd  | <b>104</b> | <b>103</b> | <b>121</b> | <b>129</b> | <b>127</b> | <b>130</b> | <b>270</b>  | <b>287</b>  | <b>329</b>  | <b>259</b>  | <b>249</b> | <b>138</b> | <b>201</b>  |
| 35 <b>Rate Period</b>                  |       |            |            |            |            |            |            |             |             |             |             |            |            |             |
| 36 Monthly/Weekly/Daily Block1         | m_cd  | 1          | 0          | 6          | 3          | 0          | 24         | 48          | 103         | 137         | 251         | 202        | 0          | 64          |
| 37 Monthly/Weekly/Daily Block2         | m_cd  | 12         | 9          | 13         | 20         | 41         | 60         | 57          | 75          | 83          | 118         | 84         | 0          | 48          |
| 38 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0           | 0           | 0          | 0          | 0           |
| 39 Hourly Nonfirm                      | m_cd  | 31         | 29         | 23         | 30         | 20         | 55         | 106         | 143         | 302         | 171         | 56         | 59         | 85          |
| 40 <b>Subtotal Rate Period</b>         | m_cd  | <b>43</b>  | <b>38</b>  | <b>41</b>  | <b>53</b>  | <b>61</b>  | <b>138</b> | <b>211</b>  | <b>321</b>  | <b>522</b>  | <b>540</b>  | <b>342</b> | <b>59</b>  | <b>197</b>  |
| 41 Rate Design 2/                      | m_cd  | 77         | 69         | 69         | 87         | 83         | 208        | 346         | 519         | 909         | 829         | 485        | 123        | 317         |

1/ Values based on market and streamflow estimates combined with historical trends

2/ m\_cd = Monthly Contract Demand (average), i.e. MW-days divided by days in month, MWh divided by hours in month

3/ Rate Design adjusted MW = 7/5 \* block 1 MW plus block 2 MW plus 7/5 \* 24/16 \* hourly MW



# **Large Generation Interconnection Agreement (LGIA) Credits**



# Transmission Credits Overview

- There are two methods to recover funds which have been advanced for the construction of Network Upgrades necessary to enable generation interconnection. (See Transmission Credits Business Practice – Version 7 for more details)
  - Method 1: Application of transmission credits against eligible transmission bills.
    - PTP Service: Transmission credits applied in a given month is based on the amount of transmission capacity reserved at the generator.
    - NT Service: Transmission credit applied in a given month is based on a ratio of the customer's MW share of a generating resource to their maximum Network load set on the hour of the transmission peak over the last 12 months.
  - Method 2: Cash payment based on the Generating Facility Capacity, multiplied by the plant capacity factor, multiplied by the current PTP Long-Term rate.



# Transmission Credits Overview, cont.

- Customers earn interest on funds advanced for Network Upgrades. Interest accrues quarterly from the date of deposit.
  - LGIAs signed prior to July 15, 2009, the FERC rate is applied or a fixed interest rate is specified in the contract.
  - LGIAs signed on or after July 15, 2009, the interest rate is the 10-year Government Agency Borrowing Rate as posted on Bloomberg, L.P. under the United States Government Agency fair market yield curve (yield curve number 84).



# Transmission Credits Rate Case Process

- The Generation Interconnection (GI) Queue was assessed to determine which generation projects were likely to be completed prior to or during the rate period.
- To the extent possible, each GI project was tied to requests in the Transmission Queue to forecast sales eligible to receive Transmission Credits.
  - When a request in the GI Queue could not be tied to requests in the Transmission Queue, a percentage of the nameplate was used to forecast the sales eligible to receive credits.
    - 30% - Year 1
    - 50% - Year 2
    - 70% - Year 3



# Transmission Credits Rate Case

## Process, cont.

- Projects begin receiving Transmission Credits on the later of the forecasted commercial operation date or their TSR start date (if applicable).
- The dollar value of the Transmission Credits was determined by multiplying the current PTP Long Term Transmission rate by the forecasted sales eligible for credits.
- Interest expense calculation was based on the applicable interest rate and the projected remaining credit balance resulting from funds advanced for Network Upgrades. In addition to the current credit balances, the GI Queue was assessed to determine what funds were expected to be advanced for Network Upgrades during the rate period.



# Transmission Credit Forecast Results

- BPA currently holds \$257 million in funds advanced for Network Upgrades that are currently receiving Transmission Credits, and holds an additional \$26 million in funds advanced for Network Upgrades for projects that have not begun receiving Transmission Credits.
- For FY13 through FY15, BPA is forecasting approximately \$130 million in additional funds advanced for Network Upgrades for continuing and future interconnection projects.
- The average interest expense associated with the Transmission Credits forecast over the rate period is \$15.4 million per year.
- The current forecast shows that BPA will issue an average of \$41.3 million in credits per year over the rate period.





# Transmission Credit/Interest Forecast

- The chart on the next two slides shows credit and interest forecasts for GI projects in four different groups:
  - Projects where customers are currently receiving Transmission Credits (rows 2-31).
  - Projects where the credit repayment forecast is based on TSRs (rows 33-39).
  - Projects where the credit repayment forecast is based on forecast project capacity (rows 41-44).
  - Projects forecasted to earn interest during the rate period, but not to receive credits (row 45).

\*Totals are shown in row 46



|          | (A)   | (B)               | (C)  | (D)  | (E)                             | (F)                             | (G)                             | (H)                     | (I)                     | (J)                     |
|----------|---|-------------------|--|--|---------------------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-------------------------|
| #        | Request   | Credit Start Date | Credit Balance as of 6/30/2012 - (Deposits Prior to Rate Period) | Network Upgrade Cost During FY13 - FY15 Period | FY 13 Credit Repayment Forecast | FY 14 Credit Repayment Forecast | FY 15 Credit Repayment Forecast | FY 13 Interest Forecast | FY 14 Interest Forecast | FY 15 Interest Forecast |
| <b>1</b> | <b>Currently Taking Credits (as of 6/30/2012)</b> |                   |  |  |                                 |                                 |                                 |                         |                         |                         |
| 2        | GI Request 1                                      | FY 2008           | \$ 7,103   | \$ -   | \$ 1,505                        | \$ 1,505                        | \$ 1,505                        | \$ 257                  | \$ 303                  | \$ 253                  |
| 3        | GI Request 2                                      | FY 2012           | \$ 105,264   | \$ -   | \$ 5,255                        | \$ 5,255                        | \$ 5,255                        | \$ 4,382                | \$ 6,490                | \$ 7,354                |
| 4        | GI Request 3                                      | FY 2011           | \$ 7,315   | \$ -   | \$ 935                          | \$ 1,090                        | \$ 1,090                        | \$ 262                  | \$ 231                  | \$ 198                  |
| 5        | GI Request 4                                      | FY 2015           | \$ 2,719   | \$ -   | \$ -                            | \$ -                            | \$ 649                          | \$ 126                  | \$ 131                  | \$ 125                  |
| 6        | GI Request 5                                      | FY 2008           | \$ 3,052   | \$ -   | \$ 2,063                        | \$ 561                          | \$ -                            | \$ 62                   | \$ 3                    | \$ -                    |
| 7        | GI Request 6                                      | FY 2010           | \$ 7,336   | \$ -   | \$ 5,971                        | \$ 384                          | \$ -                            | \$ 134                  | \$ -                    | \$ -                    |
| 8        | GI Request 7                                      | FY 2008           | \$ 9,165   | \$ -   | \$ 863                          | \$ 863                          | \$ 863                          | \$ 368                  | \$ 518                  | \$ 555                  |
| 9        | GI Request 8                                      | FY 2009           | \$ 1,438   | \$ -   | \$ 389                          | \$ 389                          | \$ 389                          | \$ 49                   | \$ 51                   | \$ 33                   |
| 10       | GI Request 9                                      | FY 2008           | \$ 762   | \$ -   | \$ 389                          | \$ 307                          | \$ -                            | \$ 20                   | \$ 7                    | \$ -                    |
| 11       | GI Request 10                                     | FY 2010           | \$ 5,788   | \$ -   | \$ 966                          | \$ 966                          | \$ 966                          | \$ 218                  | \$ 278                  | \$ 261                  |
| 12       | GI Request 11                                     | FY 2012           | \$ 54,704  | \$ -   | \$ 10,799                       | \$ 11,277                       | \$ 11,524                       | \$ 1,799                | \$ 1,440                | \$ 1,063                |
| 13       | GI Request 12                                     | FY 2009           | \$ 170   | \$ -   | \$ 67                           | \$ -                            | \$ -                            | \$ -                    | \$ -                    | \$ -                    |
| 14       | GI Request 13                                     | FY 2012           | \$ 1,658   | \$ -   | \$ 1,349                        | \$ -                            | \$ -                            | \$ 25                   | \$ -                    | \$ -                    |
| 15       | GI Request 14                                     | FY 2007           | \$ 3,121   | \$ -   | \$ 567                          | \$ 567                          | \$ 567                          | \$ 116                  | \$ 144                  | \$ 131                  |
| 16       | GI Request 15                                     | FY 2007           | \$ 3,121   | \$ -   | \$ 567                          | \$ 567                          | \$ 567                          | \$ 116                  | \$ 144                  | \$ 131                  |
| 17       | GI Request 16                                     | FY 2007           | \$ 240   | \$ -   | \$ 44                           | \$ 44                           | \$ 44                           | \$ 9                    | \$ 11                   | \$ 10                   |
| 18       | GI Request 17                                     | FY 2007           | \$ 5,522   | \$ -   | \$ 1,003                        | \$ 1,003                        | \$ 1,003                        | \$ 205                  | \$ 255                  | \$ 232                  |
| 19       | GI Request 18                                     | FY 2009           | \$ 2,384   | \$ -   | \$ 785                          | \$ 826                          | \$ 759                          | \$ 77                   | \$ 69                   | \$ 19                   |
| 20       | GI Request 19                                     | FY 2012           | \$ 6,626   | \$ -   | \$ 1,552                        | \$ 1,552                        | \$ 1,552                        | \$ 262                  | \$ 200                  | \$ 136                  |
| 21       | GI Request 20                                     | FY 2012           | \$ 6,626   | \$ -   | \$ 1,552                        | \$ 1,552                        | \$ 1,552                        | \$ 262                  | \$ 200                  | \$ 136                  |
| 22       | GI Request 21                                     | FY 2012           | \$ 2,675   | \$ -   | \$ 605                          | \$ 605                          | \$ 605                          | \$ 105                  | \$ 82                   | \$ 57                   |
| 23       | GI Request 22                                     | FY 2012           | \$ 6,859   | \$ -   | \$ 1,552                        | \$ 1,552                        | \$ 1,552                        | \$ 270                  | \$ 209                  | \$ 146                  |
| 24       | GI Request 23                                     | FY 2012           | \$ 5,076   | \$ -   | \$ 1,148                        | \$ 1,148                        | \$ 1,148                        | \$ 200                  | \$ 155                  | \$ 108                  |
| 25       | GI Request 24                                     | FY 2012           | \$ 206   | \$ -   | \$ 47                           | \$ 47                           | \$ 47                           | \$ 8                    | \$ 6                    | \$ 4                    |
| 26       | GI Request 25                                     | FY 2012           | \$ 3,426   | \$ -   | \$ 776                          | \$ 776                          | \$ 776                          | \$ 135                  | \$ 104                  | \$ 73                   |
| 27       | GI Request 26                                     | FY 2012           | \$ 3,426   | \$ -   | \$ 776                          | \$ 776                          | \$ 776                          | \$ 135                  | \$ 104                  | \$ 73                   |
| 28       | GI Request 27                                     | FY 2012           | \$ 1,028   | \$ -   | \$ 233                          | \$ 233                          | \$ 233                          | \$ 40                   | \$ 31                   | \$ 22                   |
| 29       | GI Request 28                                     | FY 2012           | \$ 822   | \$ -   | \$ 186                          | \$ 186                          | \$ 186                          | \$ 32                   | \$ 25                   | \$ 17                   |
| 30       | GI Request 29                                     | FY 2007           | \$ 8   | \$ -   | \$ -                            | \$ -                            | \$ -                            | \$ -                    | \$ -                    | \$ -                    |
| 31       | GI Request 30                                     | FY 2009           | \$ 167   | \$ -   | \$ -                            | \$ -                            | \$ -                            | \$ -                    | \$ -                    | \$ -                    |



| (A) | (B)  | (C)               | (D)  | (E)  | (F)                             | (G)                             | (H)                             | (I)                     | (J)                     |                         |
|-----|--|-------------------|--|--|---------------------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-------------------------|
| #   | Request  | Credit Start Date | Credit Balance as of 6/30/2012 - (Deposits Prior to Rate Period) | Network Upgrade Cost During FY13 - FY15 Period | FY 13 Credit Repayment Forecast | FY 14 Credit Repayment Forecast | FY 15 Credit Repayment Forecast | FY 13 Interest Forecast | FY 14 Interest Forecast | FY 15 Interest Forecast |
| 32  | <b>Credits Repaid During the Rate Period Based on TSRs</b>           |                   |  |  |                                 |                                 |                                 |                         |                         |                         |
| 33  | GI Request 31  | FY 2012           | \$ 2,647   | \$ -   | \$ 2,320                        | \$ -                            | \$ -                            | \$ 43                   | \$ -                    | \$ -                    |
| 34  | GI Request 32  | FY 2015           | \$ 1,124   | \$ 49,875                                      | \$ -                            | \$ -                            | \$ 2,336                        | \$ 525                  | \$ 1,545                | \$ 2,144                |
| 35  | GI Request 33  | FY 2015           | \$ 621   | \$ -   | \$ -                            | \$ -                            | \$ 584                          | \$ 27                   | \$ 42                   | \$ 33                   |
| 36  | GI Request 34  | FY 2015           | \$ 337   | \$ -   | \$ -                            | \$ -                            | \$ 385                          | \$ 15                   | \$ 23                   | \$ 9                    |
| 37  | GI Request 35  | FY 2015           | \$ 543   | \$ 6,156                                       | \$ -                            | \$ -                            | \$ 1,428                        | \$ 239                  | \$ 276                  | \$ 268                  |
| 38  | GI Request 36  | FY 2015           | \$ 264   | \$ 8,090                                       | \$ -                            | \$ -                            | \$ 260                          | \$ -                    | \$ 56                   | \$ 282                  |
| 39  | GI Request 37  | FY 2015           | \$ 5,001   | \$ -   | \$ -                            | \$ -                            | \$ 2,336                        | \$ 217                  | \$ 338                  | \$ 333                  |
| 40  | <b>Credits Repaid During the Rate Period Based on Plant Capacity</b> |                   |  |  |                                 |                                 |                                 |                         |                         |                         |
| 41  | GI Request 38  | FY 2014           | \$ -   | \$ 2,700                                       | \$ -                            | \$ 427                          | \$ 926                          | \$ -                    | \$ 112                  | \$ 85                   |
| 42  | GI Request 39  | FY 2015           | \$ -   | \$ 9,099                                       | \$ -                            | \$ -                            | \$ 389                          | \$ 38                   | \$ 231                  | \$ 424                  |
| 43  | GI Request 40  | FY 2015           | \$ 20  | \$ 2,999                                       | \$ -                            | \$ -                            | \$ 117                          | \$ -                    | \$ -                    | \$ 117                  |
| 44  | GI Request 41  | FY 2013           | \$ 13,926  | \$ -   | \$ 519                          | \$ 831                          | \$ 1,090                        | \$ 529                  | \$ 523                  | \$ 505                  |
| 45  | GI Request 42  | FY 2012           | \$ -   |  | \$ 223                          | \$ 270                          | \$ -                            | \$ 14                   | \$ 4                    | \$ -                    |
| 46  | <i>Not Yet Receiving Credits During the Rate Period</i>              |                   | \$ 2,128   | \$ 51,266                                      | \$ -                            | \$ -                            | \$ -                            | \$ 568                  | \$ 1,380                | \$ 2,684                |
| 47  | <b>Total Credits and Interest During the Rate Period</b>             |                   | \$ 284,419   | \$ 130,185                                     | \$ 45,004                       | \$ 35,557                       | \$ 43,458                       | \$ 11,888               | \$ 15,722               | \$ 18,019               |



# **Segmented Revenue Requirement**



# Assumptions

- Program spending levels are consistent with data presented in Integrated Program Review (IPR) workshops.
- Capital investments are consistent with the June 18 IPR Capital Update (Base).
  - BPA proposes to use \$15 million per year of reserves for capital investments. This is consistent with the outcome of the last three rate case settlement agreements.
- Changes to be expected in the Initial Proposal.
  - Updates for final IPR decisions.
  - Updates for actual FY12 results, e.g., actual capital borrowing, actual ending reserves.
  - Adjustments to ensure consistency with other forecasts (LGIA revenue credits) and studies (segmentation).



# Preliminary Income Statement

|  | A<br>FY 2014     | B<br>FY 2015     | C<br>Average | D<br>WP-12 Average | E<br>Difference |
|--|------------------|------------------|--------------|--------------------|-----------------|
| (\$thousands)                                |                  |                  |              |                    |                 |
| 1 OPERATING EXPENSES                         |                  |                  |              |                    |                 |
| 2 TRANSMISSION OPERATIONS                    | 141,340          | 145,055          | 143,198      | 131,820            | 11,378          |
| 3 TRANSMISSION MAINTENANCE                   | 155,717          | 159,470          | 157,594      | 148,772            | 8,822           |
| 4 TRANSMISSION ENGINEERING                   | 43,030           | 43,003           | 43,017       | 32,302             | 10,715          |
| 5 TRANSMISSION ACQ & ANCILLARY SERVICES      | 137,222          | 139,810          | 138,516      | 139,773            | (1,257)         |
| 6 BPA INTERNAL SUPPORT                       | 82,106           | 84,589           | 83,348       | 77,941             | 5,407           |
| 7 OTHER INCOME, EXPENSES & ADJUSTMENTS       | 0                | 0                | 0            | (33,400)           | 33,400          |
| 8 DEPRECIATION & AMORTIZATION                | 193,164          | 205,086          | 199,125      | 208,364            | (9,239)         |
| 9 TOTAL OPERATING EXPENSES                   | 752,579          | 777,013          | 764,796      | 705,571            | 59,225          |
| 10 INTEREST EXPENSE                          |                  |                  |              |                    |                 |
| 11 INTEREST EXPENSE                          |                  |                  |              |                    |                 |
| 12 FEDERAL APPROPRIATIONS                    | 17,185           | 15,797           | 16,491       | 16,741             | (250)           |
| 13 CAPITALIZATION ADJUSTMENT                 | (18,968)         | (18,968)         | (18,968)     | (18,968)           | 0               |
| 14 ON LONG-TERM DEBT                         | 139,604          | 166,800          | 153,202      | 119,332            | 33,871          |
| 15 AMORTIZATION OF CAPITALIZED BOND PREMIUMS | 561              | 561              | 561          | 561                | 0               |
| 16 DEBT SERVICE REASSIGNMENT INTEREST        | 45,419           | 38,163           | 41,791       | 53,454             | (11,663)        |
| 17 NON-FEDERAL INTEREST                      | 48,735           | 54,113           | 51,424       | 46,082             | 5,343           |
| 18 AFUDC                                     | (35,544)         | (35,677)         | (35,611)     | (31,162)           | (4,449)         |
| 19 INTEREST INCOME                           | (8,681)          | (13,876)         | (11,279)     | (19,386)           | 8,108           |
| 20 NET INTEREST EXPENSE                      | 188,312          | 206,913          | 197,613      | 166,653            | 30,959          |
| 21 TOTAL EXPENSES                            | 940,891          | 983,926          | 962,408      | 872,224            | 90,185          |
| 22 MINIMUM REQUIRED NET REVENUE 1/           | 123,245          | 92,562           | 107,903      | 74,450             | 33,454          |
| 23 PLANNED NET REVENUES FOR RISK             | 0                | 0                |              |                    |                 |
| 24 TOTAL PLANNED NET REVENUE                 | 123,245          | 92,562           | 107,903      | 74,450             | 33,454          |
| <b>25 TOTAL REVENUE REQUIREMENT</b>          | <b>1,064,136</b> | <b>1,076,487</b> | 1,070,312    | 946,673            | 123,639         |

1/ SEE NOTE ON CASH FLOW TABLE.



# Preliminary Statement of Cash Flows

| (\$thousands)                                       | A<br>FY 2014 | B<br>FY 2015 |
|---|--------------|--------------|
| 1 CASH FROM CURRENT OPERATIONS:                     |              |              |
| 2     MINIMUM REQUIRED NET REVENUE 1/               | 123,245      | 92,562       |
| 3     DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING | 15,000       | 15,000       |
| 4     EXPENSES NOT REQUIRING CASH:                  |              |              |
| 5         DEPRECIATION & AMORTIZATION               | 193,164      | 205,086      |
| 6         TRANSMISSION CREDIT PROJECTS NET INTEREST | 15,219       | 16,765       |
| 7         AMORTIZATION OF CAPITALIZED BOND PREMIUMS | 561          | 561          |
| 8         CAPITALIZATION ADJUSTMENT                 | (18,968)     | (18,968)     |
| 9     NON-CASH REVENUES                             |              |              |
| 10        AC INTERTIE CO/FIBER                      | (6,583)      | (6,583)      |
| 11        LGIA                                      | (37,038)     | (45,105)     |
| 12 CASH PROVIDED BY CURRENT OPERATIONS              | 284,600      | 259,317      |
| 13 CASH USED FOR CAPITAL INVESTMENTS:               |              |              |
| 14     INVESTMENT IN:                               |              |              |
| 15        UTILITY PLANT                             | (655,653)    | (604,321)    |
| 16 CASH USED FOR CAPITAL INVESTMENTS                | (655,653)    | (604,321)    |
| 17 CASH FROM TREASURY BORROWING AND APPROPRIATIONS: |              |              |
| 18     INCREASE IN LONG-TERM DEBT                   | 640,653      | 589,321      |
| 19     DEBT SERVICE REASSIGNMENT PRINCIPAL          | (175,093)    | (185,173)    |
| 20     REPAYMENT OF CAPITAL LEASES                  | (2,259)      | (2,259)      |
| 21     REPAYMENT OF LONG-TERM DEBT                  | (73,050)     | (15,000)     |
| 22     REPAYMENT OF CAPITAL APPROPRIATIONS          | (19,198)     | (41,885)     |
| 23 CASH FROM TREASURY BORROWING AND APPROPRIATIONS  | 371,053      | 345,004      |
| 24 ANNUAL INCREASE (DECREASE) IN CASH               | 0            | 0            |
| 25 PLANNED NET REVENUES FOR RISK                    | 0            | 0            |
| 26 TOTAL ANNUAL INCREASE (DECREASE) IN CASH         | 0            | 0            |

1/ Line 24 must be greater than or equal to zero, otherwise net revenues will be added so that there are no negative cash flows for the year.



# Preliminary Segmented Revenue Requirement

|   | A            | B                  | C              | D               | E               | F               | G               | H               |
|---|--------------|--------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| (\$thousands)                                   |              | Generation         |                | Southern        | Eastern         | Utility         | DSI             | Ancillary       |
| <b>FY 2014</b>                                  | <b>TOTAL</b> | <b>Integration</b> | <b>NETWORK</b> | <b>Intertie</b> | <b>Intertie</b> | <b>Delivery</b> | <b>Delivery</b> | <b>Services</b> |
| 1 Operations & Maintenance                      | 422,193      | 4,298              | 268,012        | 37,061          | 2,637           | 3,695           | 1,497           | 104,993         |
| 2 Transmission Acquisition & Ancillary Services | 137,223      | 59                 | 16,232         | 1,323           | 17              | 382             | 28              | 119,182         |
| 3 Depreciation                                  | 193,164      | 1,920              | 128,428        | 19,530          | 2,762           | 823             | 641             | 39,060          |
| 4 Net Interest Expense                          | 188,312      | 2,217              | 149,166        | 18,272          | 2,590           | 851             | 724             | 14,492          |
| 5 Planned Net Revenues                          | 123,245      | 1,388              | 92,437         | 17,740          | 1,622           | 533             | 453             | 9,073           |
| 6 Total Transmission Revenue Requirement        | 1,064,137    | 9,881              | 654,275        | 93,926          | 9,628           | 6,284           | 3,344           | 286,800         |
| <b>FY 2015</b>                                  |              |                    |                |                 |                 |                 |                 |                 |
| 7 Operations & Maintenance                      | 432,117      | 4,390              | 273,751        | 37,854          | 2,694           | 3,775           | 1,529           | 108,124         |
| 8 Transmission Acquisition & Ancillary Services | 139,810      | 59                 | 16,356         | 1,323           | 17              | 382             | 28              | 121,645         |
| 9 Depreciation                                  | 205,086      | 2,006              | 137,742        | 20,100          | 2,778           | 854             | 650             | 40,956          |
| 10 Net Interest Expense                         | 206,913      | 2,435              | 164,369        | 19,614          | 2,845           | 935             | 796             | 15,919          |
| 11 Planned Net Revenues                         | 92,562       | 886                | 70,654         | 14,133          | 963             | 327             | 272             | 5,327           |
| 12 Total Transmission Revenue Requirement       | 1,076,487    | 9,776              | 662,871        | 93,025          | 9,297           | 6,272           | 3,276           | 291,972         |





# Segmentation Development

|   | A              | B                         | C              | D                    | E                   | F                   | G               | H                     |
|---|----------------|---------------------------|----------------|----------------------|---------------------|---------------------|-----------------|-----------------------|
|   | TOTAL          | Generation<br>Integration | NETWORK        | Southern<br>Intertie | Eastern<br>Intertie | Utility<br>Delivery | DSI<br>Delivery | Ancillary<br>Services |
| <b>FY 2014</b>                              |                |                           |                |                      |                     |                     |                 |                       |
| 1 FCRTS INVESTMENT BASE                     | 3,893,988      | 49,868                    | 3,038,874      | 385,533              | 58,270              | 19,139              | 16,295          | 326,009               |
| 2 percent                                   | 100%           | 1.28%                     | 78.04%         | 9.90%                | 1.50%               | 0.49%               | 0.42%           | 8.37%                 |
| <b>3 INTEREST EXPENSE:</b>                  |                |                           |                |                      |                     |                     |                 |                       |
| 4 TC PROJECTS INTEREST EXPENSE              |                |                           | 17,912         | 1,134                |                     |                     |                 |                       |
| 5 TC PROJECTS AFUDC                         |                |                           | (3,827)        |                      |                     |                     |                 |                       |
| 6 TC PROJECTS NET INTEREST                  | 15,219         |                           | 14,085         | 1,134                |                     |                     |                 |                       |
| 7 REMAINING NET INTEREST EXPENSE            | 173,093        | 2,217                     | 135,082        | 17,137               | 2,590               | 851                 | 724             | 14,492                |
| <b>8 TOTAL NET INTEREST</b>                 | <b>188,312</b> | <b>2,217</b>              | <b>149,166</b> | <b>18,272</b>        | <b>2,590</b>        | <b>851</b>          | <b>724</b>      | <b>14,492</b>         |
| <b>9 PLANNED NET REVENUE:</b>               |                |                           |                |                      |                     |                     |                 |                       |
| 10 TC PROJECTS REVENUE CREDITS              |                |                           | 28,613         | 8,425                |                     |                     |                 |                       |
| 11 TC PROJECTS NET INTEREST                 |                |                           | 14,085         | 1,134                |                     |                     |                 |                       |
| 12 TC PROJECTS DEPRECIATION                 |                |                           | 6,664          | 280                  |                     |                     |                 |                       |
| 13 TC PROJECTS MINIMUM REQUIRED NET REVENUE | 14,876         |                           | 7,865          | 7,011                |                     |                     |                 |                       |
| 14 REMAINING PLANNED NET REVENUE            | 108,370        | 1,388                     | 84,572         | 10,729               | 1,622               | 533                 | 453             | 9,073                 |
| <b>15 TOTAL PLANNED NET REVENUE</b>         | <b>123,245</b> | <b>1,388</b>              | <b>92,437</b>  | <b>17,740</b>        | <b>1,622</b>        | <b>533</b>          | <b>453</b>      | <b>9,073</b>          |
| <b>16 DIRECT DEPRECIATION</b>               | 174,540        | 1,730                     | 116,606        | 17,895               | 2,646               | 660                 | 575             | 34,429                |
| 17 percentage of Direct O&M w/out AS        | 100%           | 1.02%                     | 63.48%         | 8.78%                | 0.62%               | 0.88%               | 0.35%           | 24.87%                |
| 18 TRANSMISSION GENERAL PLANT               | 18,624         | 190                       | 11,823         | 1,635                | 116                 | 163                 | 66              | 4,632                 |
| <b>19 TOTAL DEPRECIATION EXPENSE</b>        | <b>193,164</b> | <b>1,920</b>              | <b>128,428</b> | <b>19,530</b>        | <b>2,762</b>        | <b>823</b>          | <b>641</b>      | <b>39,060</b>         |



# Segmentation Development

|  | A              | B                         | C              | D                    | E                   | F                   | G               | H                     |
|--|----------------|---------------------------|----------------|----------------------|---------------------|---------------------|-----------------|-----------------------|
|  | TOTAL          | Generation<br>Integration | NETWORK        | Southern<br>Intertie | Eastern<br>Intertie | Utility<br>Delivery | DSI<br>Delivery | Ancillary<br>Services |
| <b>FY 2014 continued</b>                       |                |                           |                |                      |                     |                     |                 |                       |
| 20 <b>O&amp;M SEGMENTATION:</b>                |                |                           |                |                      |                     |                     |                 |                       |
| 21 <b>SEGMENTATION STUDY AVERAGES</b>          |                |                           |                |                      |                     |                     |                 |                       |
| 22 3-YEAR AVERAGE O&M: LINES                   | 54,952         | 401                       | 50,991         | 2,926                | 621                 | 13                  | 0               |                       |
| 23 3-YEAR AVERAGE O&M: SUBSTATIONS             | 57,752         | 1,126                     | 44,236         | 10,242               | 316                 | 1,300               | 532             |                       |
| 24 TOTAL 3-YEAR AVERAGE O&M                    | 112,704        |                           |                |                      |                     |                     |                 |                       |
| 25 System Operation, Maintenance & Environment |                |                           |                |                      |                     |                     |                 |                       |
| 26 SYSTEM OPERATION                            | 22,307         |                           |                |                      |                     |                     |                 | 46,315                |
| 27 SYSTEM MAINTENANCE                          | 151,229        |                           |                |                      |                     |                     |                 |                       |
| 28 ENVIRONMENTAL OPERATIONS                    | 4,488          |                           |                |                      |                     |                     |                 |                       |
| 29 TOTAL TO SEGMENT                            | 178,024        |                           |                |                      |                     |                     |                 |                       |
| 30 DIRECT LINES O&M                            | 86,801         | 633                       | 80,544         | 4,622                | 981                 | 21                  |                 |                       |
| 31 DIRECT SUBS O&M                             | 91,223         | 1,779                     | 69,874         | 16,178               | 499                 | 2,053               | 840             |                       |
| 32 TOTAL DIRECT TRANSMISSION O&M               | 178,024        | 2,412                     | 150,418        | 20,800               | 1,480               | 2,074               | 840             |                       |
| 33 SCHEDULING                                  | 12,611         |                           |                |                      |                     |                     |                 | 12,611                |
| 34 TOTAL DIRECT O&M (w/AS)                     | 236,950        | 2,412                     | 150,418        | 20,800               | 1,480               | 2,074               | 840             | 58,926                |
| 35 <b>OVERHEAD CATEGORIES</b>                  |                |                           |                |                      |                     |                     |                 |                       |
| 36 MARKETING                                   | 18,834         | 192                       | 11,956         | 1,653                | 118                 | 165                 | 67              | 4,684                 |
| 37 BUSINESS SUPPORT                            | 41,273         | 420                       | 26,200         | 3,623                | 258                 | 361                 | 146             | 10,264                |
| 38 SYSTEM ENGINEERING                          | 43,030         | 438                       | 27,316         | 3,777                | 269                 | 377                 | 153             | 10,701                |
| 39 COPORATE                                    | 82,106         | 836                       | 52,122         | 7,207                | 513                 | 719                 | 291             | 20,419                |
| 40 <b>TOTAL O&amp;M</b>                        | <b>422,193</b> | <b>4,298</b>              | <b>268,012</b> | <b>37,061</b>        | <b>2,637</b>        | <b>3,695</b>        | <b>1,497</b>    | <b>104,993</b>        |
| 41 PAYMENTS TO POWER SERVICES:                 |                |                           |                |                      |                     |                     |                 |                       |
| 42 STATION SERVICE                             | 3,024          | 59                        | 2,316          | 536                  | 17                  | 68                  | 28              |                       |
| 43 REDISPATCH                                  | 0              |                           |                |                      |                     |                     |                 |                       |
| 44 SYNCHRONOUS CONDENSERS/GEN DROP             | 2,761          |                           | 1,974          | 787                  |                     |                     |                 |                       |
| 45 GENERATION INPUTS                           | 119,182        |                           |                |                      |                     |                     |                 | 119,182               |
| 46 COE/USBR TRANSMISSION                       | 5,929          |                           | 5,615          |                      |                     | 314                 |                 |                       |
| 47 PAYMENTS TO OTHERS (NON-PS):                |                |                           |                |                      |                     |                     |                 |                       |
| 48 NON-BBL ANCILLARY SERVICES                  | 5,811          |                           | 5,811          |                      |                     |                     |                 |                       |
| 49 SETTLEMENT AGREEMENTS                       | 516            |                           | 516            |                      |                     |                     |                 |                       |
| 50 <b>TOTAL TRANS ACQ &amp; ANCLRY</b>         | <b>137,223</b> | <b>59</b>                 | <b>16,232</b>  | <b>1,323</b>         | <b>17</b>           | <b>382</b>          | <b>28</b>       | <b>119,182</b>        |



# Segmentation Development

|   | A              | B                         | C              | D                    | E                   | F                   | G               | H                     |
|---|----------------|---------------------------|----------------|----------------------|---------------------|---------------------|-----------------|-----------------------|
|   | TOTAL          | Generation<br>Integration | NETWORK        | Southern<br>Intertie | Eastern<br>Intertie | Utility<br>Delivery | DSI<br>Delivery | Ancillary<br>Services |
| <b>FY 2015</b>                              |                |                           |                |                      |                     |                     |                 |                       |
| 1 INVESTMENT BASE                           | 4,248,370      | 52,526                    | 3,386,106      | 401,533              | 57,059              | 19,364              | 16,144          | 315,638               |
| 2 percent                                   | 100%           | 1.24%                     | 79.70%         | 9.45%                | 1.34%               | 0.46%               | 0.38%           | 7.43%                 |
| <b>3 INTEREST EXPENSE:</b>                  |                |                           |                |                      |                     |                     |                 |                       |
| 4 TC PROJECTS INTEREST EXPENSE              |                |                           | 19,669         | 788                  |                     |                     |                 |                       |
| 5 TC PROJECTS AFUDC                         |                |                           | (3,692)        |                      |                     |                     |                 |                       |
| 6 TC PROJECTS NET INTEREST                  | 16,765         |                           | 15,977         | 788                  |                     |                     |                 |                       |
| 7 REMAINING NET INTEREST EXPENSE            | 190,148        | 2,435                     | 148,392        | 18,826               | 2,845               | 935                 | 796             | 15,919                |
| <b>8 TOTAL NET INTEREST</b>                 | <b>206,913</b> | <b>2,435</b>              | <b>164,369</b> | <b>19,614</b>        | <b>2,845</b>        | <b>935</b>          | <b>796</b>      | <b>15,919</b>         |
| <b>9 PLANNED NET REVENUE:</b>               |                |                           |                |                      |                     |                     |                 |                       |
| 10 TC PROJECTS REVENUE CREDITS              |                |                           | 36,680         | 8,425                |                     |                     |                 |                       |
| 11 TC PROJECTS NET INTEREST                 |                |                           | 15,977         | 788                  |                     |                     |                 |                       |
| 12 TC PROJECTS DEPRECIATION                 |                |                           | 7,192          | 280                  |                     |                     |                 |                       |
| 13 TC PROJECTS MINIMUM REQUIRED NET REVENUE | 20,868         |                           | 13,511         | 7,357                |                     |                     |                 |                       |
| 14 REMAINING PLANNED NET REVENUE            | 71,694         | 886                       | 57,143         | 6,776                | 963                 | 327                 | 272             | 5,327                 |
| <b>15 TOTAL PLANNED NET REVENUE</b>         | <b>92,562</b>  | <b>886</b>                | <b>70,654</b>  | <b>14,133</b>        | <b>963</b>          | <b>327</b>          | <b>272</b>      | <b>5,327</b>          |
| <b>16 DIRECT DEPRECIATION</b>               | 183,889        | 1,790                     | 124,286        | 18,239               | 2,646               | 668                 | 575             | 35,685                |
| 17 percentage of Direct O&M w/out AS        | 100%           | 1.02%                     | 63.35%         | 8.76%                | 0.62%               | 0.87%               | 0.35%           | 25.02%                |
| 18 TRANSMISSION GENERAL PLANT               | 21,197         | 216                       | 13,456         | 1,861                | 132                 | 186                 | 75              | 5,271                 |
| <b>19 TOTAL DEPRECIATION EXPENSE</b>        | <b>205,086</b> | <b>2,006</b>              | <b>137,742</b> | <b>20,100</b>        | <b>2,778</b>        | <b>854</b>          | <b>650</b>      | <b>40,956</b>         |



# Segmentation Development

|  | A              | B                         | C              | D                    | E                   | F                   | G               | H                     |
|--|----------------|---------------------------|----------------|----------------------|---------------------|---------------------|-----------------|-----------------------|
|  | TOTAL          | Generation<br>Integration | NETWORK        | Southern<br>Intertie | Eastern<br>Intertie | Utility<br>Delivery | DSI<br>Delivery | Ancillary<br>Services |
| <b>FY 2015 continued</b>                       |                |                           |                |                      |                     |                     |                 |                       |
| 20 <b>O&amp;M SEGMENTATION:</b>                |                |                           |                |                      |                     |                     |                 |                       |
| 21 <b>SEGMENTATION STUDY AVERAGES</b>          |                |                           |                |                      |                     |                     |                 |                       |
| 22 3-YEAR AVERAGE O&M: LINES                   | 54,952         | 401                       | 50,991         | 2,926                | 621                 | 13                  | 0               |                       |
| 23 3-YEAR AVERAGE O&M: SUBSTATIONS             | 57,752         | 1,126                     | 44,236         | 10,242               | 316                 | 1,300               | 532             |                       |
| 24 TOTAL 3-YEAR AVERAGE O&M                    | 112,704        |                           |                |                      |                     |                     |                 |                       |
| 25 System Operation, Maintenance & Environment |                |                           |                |                      |                     |                     |                 |                       |
| 26 SYSTEM OPERATION                            | 22,815         |                           |                |                      |                     |                     |                 | 47,968                |
| 27 SYSTEM MAINTENANCE                          | 154,884        |                           |                |                      |                     |                     |                 |                       |
| 28 ENVIRONMENTAL OPERATIONS                    | 4,586          |                           |                |                      |                     |                     |                 |                       |
| 29 TOTAL TO SEGMENT                            | 182,285        |                           |                |                      |                     |                     |                 |                       |
| 30 DIRECT LINES O&M                            | 88,878         | 649                       | 82,472         | 4,732                | 1,004               | 21                  | 0               |                       |
| 31 DIRECT SUBS O&M                             | 93,407         | 1,821                     | 71,546         | 16,565               | 511                 | 2,103               | 860             |                       |
| 32 TOTAL DIRECT TRANSMISSION O&M               | 182,285        | 2,470                     | 154,018        | 21,298               | 1,515               | 2,124               | 860             |                       |
| 33 SCHEDULING                                  | 12,865         |                           |                |                      |                     |                     |                 | 12,865                |
| 34 TOTAL DIRECT O&M (w/AS)                     | 243,118        | 2,470                     | 154,018        | 21,298               | 1,515               | 2,124               | 860             | 60,833                |
| 35 <b>OVERHEAD CATEGORIES</b>                  |                |                           |                |                      |                     |                     |                 |                       |
| 36 MARKETING                                   | 19,233         | 195                       | 12,184         | 1,685                | 120                 | 168                 | 68              | 4,812                 |
| 37 BUSINESS SUPPORT                            | 42,174         | 428                       | 26,718         | 3,695                | 263                 | 368                 | 149             | 10,553                |
| 38 SYSTEM ENGINEERING                          | 43,003         | 437                       | 27,243         | 3,767                | 268                 | 376                 | 152             | 10,760                |
| 39 COPORATE                                    | 84,589         | 859                       | 53,588         | 7,410                | 527                 | 739                 | 299             | 21,166                |
| 40 <b>TOTAL O&amp;M</b>                        | <b>432,117</b> | <b>4,390</b>              | <b>273,751</b> | <b>37,854</b>        | <b>2,694</b>        | <b>3,775</b>        | <b>1,529</b>    | <b>108,124</b>        |
| 41 PAYMENTS TO POWER SERVICES:                 |                |                           |                |                      |                     |                     |                 |                       |
| 42 STATION SERVICE                             | 3,024          | 59                        | 2,316          | 536                  | 17                  | 68                  | 28              |                       |
| 43 REDISPATCH                                  | 0              |                           |                |                      |                     |                     |                 |                       |
| 44 SYNCHRONOUS CONDENSERS/GEN DROP             | 2,761          |                           | 1,974          | 787                  |                     |                     |                 |                       |
| 45 GENERATION INPUTS                           | 121,645        |                           |                |                      |                     |                     |                 | 121,645               |
| 46 COE/USBR TRANSMISSION                       | 5,929          |                           | 5,615          |                      |                     | 314                 |                 |                       |
| 47 PAYMENTS TO OTHERS (NON-PS):                |                |                           |                |                      |                     |                     |                 |                       |
| 48 NON-BBL ANCILLARY SERVICES                  | 5,926          |                           | 5,926          |                      |                     |                     |                 |                       |
| 49 SETTLEMENT AGREEMENTS                       | 525            |                           | 525            |                      |                     |                     |                 |                       |
| 50 <b>TOTAL TRANS ACQ &amp; ANCLRY</b>         | <b>139,810</b> | <b>59</b>                 | <b>16,356</b>  | <b>1,323</b>         | <b>17</b>           | <b>382</b>          | <b>28</b>       | <b>121,645</b>        |



# Interest Credit Calculation

|  | A       | B       | C        | D        | E        | F  |
|--|---------|---------|----------|----------|----------|--|
| (\$thousands)                          | 2011    | 2012    | 2013     | 2014     | 2015     | Notes  |
| 1 Annual Cash Surplus/(Deficit)        |         |         | (30,717) | 0        | 0        | FY 2013 from revised revenue test check                    |
| 2 Adjustments to Cash                  |         |         | (15,000) | (15,000) | (15,000) | Reserves financing assumption                              |
| 3 SOY Cash Balance                     |         | 512,984 | 460,000  | 420,928  | 405,928  | 2012 from First Quarter Review; exludes deferred borrowing |
| 4 EOY Cash Balance                     | 512,984 | 460,000 | 414,283  | 405,928  | 390,928  | 2011 actual cash balance                                   |
| 5 Average Cash Balance                 |         | 486,492 | 437,142  | 413,428  | 398,428  |  |
| 6 Interest Income Rate                 |         |         | 1.52%    | 1.52%    | 2.60%    |  |
| 7 Annual Interest Income on Reserves   |         | -       | 6,645    | 6,284    | 10,359   |  |
| 8 Interest Income from Repayment Study |         |         | 1,040    | 1,198    | 2,104    |  |
| 9 Total Interest Income                |         |         | 9,262    | 8,681    | 13,876   |  |



# Ancillary Services

| (\$thousands)          | A                        | B                                    | C                             | D                               | E     | F                 | G                 |
|------------------------|--------------------------|--------------------------------------|-------------------------------|---------------------------------|-------|-------------------|-------------------|
|                        | Total Ancillary Services | Scheduling, Syst Control, & Dispatch | Regulation & Freqncy Response | Dispatchable Resource Balnc Res | VERBS | Op Resrv Spinning | Op Resrv Supplmtl |
| <b>FY 2014</b>         |                          |                                      |                               |                                 |       |                   |                   |
| 1 Direct O&M           | 58,926                   | 58,926                               | 0                             |                                 | 0     | 0                 | 0                 |
| 2 Overheads            | 46,067                   | 46,067                               | 0                             |                                 | 0     | 0                 | 0                 |
| 3 Total O&M            | 104,993                  | 104,993                              | 0                             |                                 | 0     | 0                 | 0                 |
| 4 Generation Inputs    | 119,182                  | 0                                    |                               |                                 |       |                   |                   |
| 5 Depreciation         | 39,060                   | 39,060                               |                               |                                 |       |                   |                   |
| 6 Net Interest Expense | 14,492                   | 14,492                               |                               |                                 |       |                   |                   |
| 7 Planned Net Revenue  | 9,073                    | 9,073                                |                               |                                 |       |                   |                   |
| 8 Total Rev Req        | 286,800                  | 167,618                              | 0                             |                                 | 0     | 0                 | 0                 |
| <b>FY 2015</b>         |                          |                                      |                               |                                 |       |                   |                   |
| 1 Direct O&M           | 60,833                   | 60,833                               | 0                             |                                 | 0     | 0                 | 0                 |
| 2 Overheads            | 0                        | 0                                    | 0                             |                                 | 0     | 0                 | 0                 |
| 3 Total O&M            | 60,833                   | 60,833                               | 0                             |                                 | 0     | 0                 | 0                 |
| 4 Generation Inputs    | 121,645                  | 0                                    | 0                             | 0                               | 0     | 0                 | 0                 |
| 5 Depreciation         | 40,956                   | 40,956                               |                               |                                 |       |                   |                   |
| 6 Net Interest Expense | 15,919                   | 15,919                               |                               |                                 |       |                   |                   |
| 7 Planned Net Revenue  | 5,327                    | 5,327                                |                               |                                 |       |                   |                   |
| 8 Total Rev Req        | 244,680                  | 123,035                              | 0                             |                                 | 0     | 0                 | 0                 |



# Next Steps

- Upcoming Workshops
  - August 8
    - Transmission Pre-Rate Case – AM
      - Segmentation
      - Incremental Rate
      - Redispatch
      - Revenue Forecast
      - Risk Analysis/Use of Reserves
    - Generation Inputs – PM
  - August 22 - Transmission Pre-Rate Case - AM
    - Reservation Fee
    - Montana Intertie
  - [http://www.bpa.gov/corporate/ratecase/bp14\\_meeting\\_ws.cfm](http://www.bpa.gov/corporate/ratecase/bp14_meeting_ws.cfm)



# Appendix - FY 2012-2013 Rate Case Sales Forecast





# FY 2012-2013 Rate Case Sales Forecast Network Segment – Long Term

| (MegaWatts)                               |            |               |               |               |               |               |               |               |               |               |               |               |               |               |
|---|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (A)<br>Transmission Rate Schedule         | (B)<br>MWs | (C)<br>Oct    | (D)<br>Nov    | (E)<br>Dec    | (F)<br>Jan    | (G)<br>Feb    | (H)<br>Mar    | (I)<br>Apr    | (J)<br>May    | (K)<br>Jun    | (L)<br>Jul    | (M)<br>Aug    | (N)<br>Sep    | (O)<br>Annual |
| <b>1 Network</b>                          |            |               |               |               |               |               |               |               |               |               |               |               |               |               |
| <b>2 FY 2012</b>                          |            |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 3 Formula Power Transmission (FPT.1)      | m_cd       | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         |
| 4 Formula Power Transmission (FPT.3)      | m_cd       | 66            | 76            | 87            | 87            | 79            | 73            | 69            | 68            | 63            | 65            | 67            | 66            | 72            |
| 5 Integration of Resources (IR)           | m_cd       | 1,593         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,433         | 1,446         |
| 6 Point to Point (PTP)                    | m_cd       | 22,722        | 22,812        | 23,055        | 23,055        | 23,055        | 23,105        | 23,599        | 23,662        | 23,737        | 23,737        | 23,066        | 23,126        | 23,228        |
| 7 Network Transmission (NT)               | m_cp       | 6,264         | 6,972         | 7,936         | 7,506         | 7,126         | 6,498         | 6,082         | 5,684         | 5,626         | 6,417         | 6,185         | 5,433         | 6,478         |
| <b>8 Subtotal FY 2012</b>                 |            | <b>32,143</b> | <b>32,791</b> | <b>34,008</b> | <b>33,578</b> | <b>33,190</b> | <b>32,606</b> | <b>32,681</b> | <b>32,344</b> | <b>32,357</b> | <b>33,150</b> | <b>32,248</b> | <b>31,556</b> | <b>32,721</b> |
| <b>9 FY 2013</b>                          |            |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 10 Formula Power Transmission (FPT.1)     | m_cd       | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         | 1,497         |
| 11 Formula Power Transmission (FPT.3)     | m_cd       | 66            | 76            | 87            | 87            | 79            | 73            | 69            | 68            | 63            | 65            | 67            | 66            | 72            |
| 12 Integration of Resources (IR)          | m_cd       | 1,433         | 1,433         | 1,433         | 1,427         | 1,427         | 1,427         | 1,427         | 1,427         | 1,427         | 1,427         | 1,427         | 1,427         | 1,429         |
| 13 Point to Point (PTP)                   | m_cd       | 23,312        | 23,271        | 23,419        | 23,475        | 23,475        | 24,297        | 24,322        | 24,292        | 24,389        | 24,389        | 24,989        | 24,989        | 24,052        |
| 14 Network Transmission (NT)              | m_cp       | 6,363         | 7,076         | 8,044         | 7,599         | 7,265         | 6,591         | 6,174         | 5,782         | 5,724         | 6,524         | 6,291         | 5,527         | 6,580         |
| <b>15 Subtotal FY 2013</b>                |            | <b>32,671</b> | <b>33,353</b> | <b>34,480</b> | <b>34,086</b> | <b>33,743</b> | <b>33,885</b> | <b>33,489</b> | <b>33,067</b> | <b>33,101</b> | <b>33,903</b> | <b>34,272</b> | <b>33,506</b> | <b>33,630</b> |
| <b>16 Network Average for Rate Period</b> |            |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 17 Formula Power Transmission (FPT)       | m_cd       | 1,563         | 1,573         | 1,584         | 1,584         | 1,576         | 1,570         | 1,566         | 1,565         | 1,560         | 1,562         | 1,564         | 1,563         | 1,570         |
| 18 Integration of Resources (IR)          | m_cd       | 1,513         | 1,433         | 1,433         | 1,430         | 1,430         | 1,430         | 1,430         | 1,430         | 1,430         | 1,430         | 1,430         | 1,430         | 1,437         |
| 19 Point to Point (PTP)                   | m_cd       | 23,017        | 23,042        | 23,237        | 23,265        | 23,265        | 23,701        | 23,960        | 23,977        | 24,063        | 24,063        | 24,028        | 24,058        | 23,640        |
| 20 Network Transmission (NT)              | m_cp       | 6,314         | 7,024         | 7,990         | 7,553         | 7,196         | 6,544         | 6,128         | 5,733         | 5,675         | 6,471         | 6,238         | 5,480         | 6,529         |
| <b>21 Subtotal Network</b>                |            | <b>32,407</b> | <b>33,072</b> | <b>34,244</b> | <b>33,832</b> | <b>33,467</b> | <b>33,246</b> | <b>33,085</b> | <b>32,706</b> | <b>32,729</b> | <b>33,526</b> | <b>33,260</b> | <b>32,531</b> | <b>33,175</b> |



# FY 2012-2013 Rate Case Initial Sales Forecast Intertie Segment – Long Term

|                            |  | (MegaWatts) |       |       |       |       |       |       |       |       |       |       |       |        |  |
|----------------------------|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--|
| (A)                        | (B)  | (C)         | (D)   | (E)   | (F)   | (G)   | (H)   | (I)   | (J)   | (K)   | (L)   | (M)   | (N)   | (O)    |  |
| Transmission Rate Schedule | MWs  | Oct         | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Annual |  |
| 1                          | <b>Southern Intertie</b>                         |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 2                          | <b>FY 2012</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 3                          | Southern Intertie (IS)                           | m_cd        | 5,971 | 5,926 | 5,926 | 5,926 | 5,926 | 5,926 | 5,926 | 5,971 | 5,971 | 5,971 | 5,971 | 5,949  |  |
| 4                          | <b>FY 2013</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 5                          | Southern Intertie (IS)                           | m_cd        | 5,971 | 5,926 | 5,926 | 5,926 | 5,926 | 5,926 | 5,851 | 5,971 | 5,971 | 5,971 | 5,971 | 5,942  |  |
| 6                          | <b>Southern Intertie Average for Rate Period</b> |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 7                          | <b>Subtotal Southern Intertie (IS)</b>           | m_cd        | 5,971 | 5,926 | 5,926 | 5,926 | 5,926 | 5,926 | 5,889 | 5,971 | 5,971 | 5,971 | 5,971 | 5,945  |  |
| 8                          | <b>Montana Intertie</b>                          |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 9                          | <b>FY 2012</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 10                         | Montana Intertie (IM)                            | m_cd        | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16     |  |
| 11                         | <b>FY 2013</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |        |  |
| 12                         | Montana Intertie (IM)                            | m_cd        | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16     |  |



# FY 2012-2013 Rate Case Initial Sales Forecast Short-Term

| (A)                                    | (B)   | (C)        | (D)        | (E)        | (F)          | (G)         | (H)         | (I)         | (J)         | (K)         | (L)         | (M)         | (N)        | (O)         |
|--|-------|------------|------------|------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|
| Short-term Product                     | Units | Oct.       | Nov.       | Dec.       | Jan.         | Feb.        | Mar.        | Apr.        | May         | Jun.        | Jul.        | Aug.        | Sep.       | Annual      |
| 1 Days in Month                        |       | 31         | 30         | 31         | 31           | 28          | 31          | 30          | 31          | 30          | 31          | 31          | 30         |             |
| 2 <b>Network (PTP only short-term)</b> |       |            |            |            | 2012 leap yr | 29          |             |             |             |             |             |             |            |             |
| 3 <b>FY 2012 1/</b>                    |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 4 Monthly/Weekly/Daily Block1          | m_cd  | 107        | 63         | 151        | 145          | 138         | 342         | 294         | 612         | 826         | 335         | 91          | 50         | 263         |
| 5 Monthly/Weekly/Daily Block2          | m_cd  | 259        | 240        | 223        | 398          | 639         | 457         | 576         | 1,070       | 1,184       | 576         | 208         | 229        | 505         |
| 6 Hourly Firm                          | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 7 Hourly Nonfirm                       | m_cd  | 161        | 205        | 312        | 419          | 324         | 317         | 681         | 640         | 659         | 568         | 398         | 296        | 415         |
| 8 <b>Subtotal FY 2012</b>              | m_cd  | <b>526</b> | <b>508</b> | <b>686</b> | <b>962</b>   | <b>1101</b> | <b>1116</b> | <b>1550</b> | <b>2321</b> | <b>2669</b> | <b>1479</b> | <b>697</b>  | <b>575</b> | <b>1183</b> |
| 9 <b>FY 2013 1/</b>                    |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 10 Monthly/Weekly/Daily Block1         | m_cd  | 117        | 67         | 158        | 149          | 145         | 342         | 173         | 600         | 808         | 330         | 172         | 53         | 260         |
| 11 Monthly/Weekly/Daily Block2         | m_cd  | 277        | 248        | 232        | 410          | 679         | 458         | 419         | 1,049       | 1,157       | 565         | 261         | 232        | 499         |
| 12 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 13 Hourly Nonfirm                      | m_cd  | 174        | 213        | 326        | 429          | 344         | 317         | 462         | 633         | 644         | 553         | 722         | 306        | 427         |
| 14 <b>Subtotal FY 2013</b>             | m_cd  | <b>568</b> | <b>528</b> | <b>716</b> | <b>988</b>   | <b>1169</b> | <b>1118</b> | <b>1055</b> | <b>2282</b> | <b>2608</b> | <b>1448</b> | <b>1156</b> | <b>591</b> | <b>1186</b> |
| 15 <b>Rate Period</b>                  |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 16 Monthly/Weekly/Daily Block1         | m_cd  | 112        | 65         | 155        | 147          | 142         | 342         | 233         | 606         | 817         | 332         | 132         | 51         | 261         |
| 17 Monthly/Weekly/Daily Block2         | m_cd  | 268        | 244        | 228        | 404          | 659         | 458         | 498         | 1,059       | 1,170       | 570         | 235         | 231        | 502         |
| 18 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 19 Hourly Nonfirm                      | m_cd  | 167        | 209        | 319        | 424          | 334         | 317         | 571         | 636         | 651         | 560         | 560         | 301        | 421         |
| 20 <b>Subtotal Rate Period</b>         | m_cd  | <b>547</b> | <b>518</b> | <b>701</b> | <b>975</b>   | <b>1135</b> | <b>1117</b> | <b>1302</b> | <b>2302</b> | <b>2638</b> | <b>1463</b> | <b>926</b>  | <b>583</b> | <b>1184</b> |
| 21 Rate Design 2/                      | m_cd  | 776        | 774        | 1114       | 1500         | 1559        | 1602        | 2024        | 3244        | 3681        | 2212        | 1595        | 934        | 1,752       |
| 22 <b>Southern Intertie</b>            |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 23 <b>FY 2012 1/</b>                   |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 24 Monthly/Weekly/Daily Block1         | m_cd  | 2          | 30         | 10         | 12           | 5           | 28          | 59          | 86          | 113         | 112         | 116         | 12         | 49          |
| 25 Monthly/Weekly/Daily Block2         | m_cd  | 41         | 27         | 54         | 56           | 73          | 66          | 102         | 86          | 93          | 61          | 55          | 37         | 63          |
| 26 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 27 Hourly Nonfirm                      | m_cd  | 49         | 31         | 58         | 43           | 37          | 42          | 89          | 107         | 136         | 82          | 34          | 86         | 66          |
| 28 <b>Subtotal FY 2012</b>             | m_cd  | <b>92</b>  | <b>88</b>  | <b>122</b> | <b>111</b>   | <b>114</b>  | <b>135</b>  | <b>249</b>  | <b>279</b>  | <b>342</b>  | <b>256</b>  | <b>205</b>  | <b>134</b> | <b>177</b>  |
| 29 <b>FY 2013 1/</b>                   |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 30 Monthly/Weekly/Daily Block1         | m_cd  | 2          | 15         | 10         | 14           | 6           | 27          | 64          | 89          | 108         | 114         | 141         | 12         | 50          |
| 31 Monthly/Weekly/Daily Block2         | m_cd  | 47         | 56         | 54         | 66           | 81          | 63          | 111         | 89          | 90          | 62          | 67          | 38         | 69          |
| 32 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 33 Hourly Nonfirm                      | m_cd  | 55         | 33         | 58         | 49           | 40          | 40          | 95          | 109         | 131         | 83          | 41          | 88         | 69          |
| 34 <b>Subtotal FY 2013</b>             | m_cd  | <b>104</b> | <b>103</b> | <b>121</b> | <b>129</b>   | <b>127</b>  | <b>130</b>  | <b>270</b>  | <b>287</b>  | <b>329</b>  | <b>259</b>  | <b>249</b>  | <b>138</b> | <b>187</b>  |
| 35 <b>Rate Period</b>                  |       |            |            |            |              |             |             |             |             |             |             |             |            |             |
| 36 Monthly/Weekly/Daily Block1         | m_cd  | 2          | 22         | 10         | 13           | 5           | 27          | 61          | 88          | 111         | 113         | 128         | 12         | 49          |
| 37 Monthly/Weekly/Daily Block2         | m_cd  | 44         | 42         | 54         | 61           | 77          | 64          | 107         | 87          | 91          | 62          | 61          | 37         | 66          |
| 38 Hourly Firm                         | m_cd  | 0          | 0          | 0          | 0            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           |
| 39 Hourly Nonfirm                      | m_cd  | 52         | 32         | 58         | 46           | 38          | 41          | 92          | 108         | 134         | 82          | 37          | 87         | 67          |
| 40 <b>Subtotal Rate Period</b>         | m_cd  | <b>98</b>  | <b>96</b>  | <b>122</b> | <b>120</b>   | <b>120</b>  | <b>132</b>  | <b>260</b>  | <b>283</b>  | <b>335</b>  | <b>257</b>  | <b>227</b>  | <b>136</b> | <b>182</b>  |
| 41 Rate Design 2/                      | m_cd  | 156        | 140        | 189        | 176          | 165         | 189         | 385         | 437         | 527         | 393         | 319         | 236        | 276         |

1/ Values based on market and streamflow estimates combined with historical trends

2/ m\_cd = Monthly Contract Demand (average), i.e. MW-days divided by days in month, MWh divided by hours in month

3/ Rate Design adjusted MW = 7/5 \* block 1 MW plus block 2 MW plus 7/5 \* 24/16 \* hourly MW

