FY 2018 CRC Calculation

Sep 2016

			FY 2018		
Step 1	**BFBB**	Basin Fund Beginning Balance ($)	$103,832,000		Projected beginning balance for FY per financial cash flow analysis (FY Beginning Bal * 1000)
	BFTB	Basin Fund Target Balance	$62,299,200	*	Basin Fund Target Balance is Based on "tiered" criteria.
	PAR	Projected Annual Revenue ($) w/o CRC	$203,146,000		Per financial cash flow analysis, (=TOTAL REV *1000)
	PAE	Projected Annual Expense ($) (Excludes WRP)	$214,975,000		Per financial cash flow analysis, (=TOTAL EXP *1000)
	NR	Net Revenue ($)	($11,829,000)		=PAR-PAE
	NB	Net Balance ($)	$92,003,000		=BFBB + NR
Step 2	**EA**	SHP Energy Allocation (GWh)	4,948.78		FY '16 SHP energy allocation excluding project use (=SHP DELIVERIES / 1MIL)
	HE	Forecasted Hydro Energy (GWH)	4,854.38		Projected generation from the most current 24-month study, does not include project use (=NET GEN / 1MIL)
	FE	Forecasted Energy Purchase (GWh)	503		Forecasted Energy Purchase (GWh) from the most current 24-month study (=FIRMING PURCHASES / 1MIL)
	Price	Average price per MWh for purchased power	$28.29		Average price = 60% onpeak + 40% offpeak (=COMP PRICE)
	FX	Forecasted Energy Purchase Expense ($)	$14,230,927		Estimated purchased power costs based upon most current 24-month study (= PURCHASE COST)
Step 3	**FA1**	Basin Fund Balance Factor ($)	$14,230,927		If NB is greater than BFTB then use FA1=FX, if NB is less than BFTB then use FX-(BFTB-NB) Formula is: -IF(NB>BFTB,FX,FX-(BFTB-NB))
					If NR is greater than -(1 - tiered percent) of BFBB then FX, if NR is less than -(1 - tiered percent) of BFBB then, FX+(NR+(tiered percent *BFBB)). Formula is: =IF(NR>-(1 - tiered percent *BFBB),FX,FX+(NR+(1- tiered percent *BFBB)))
	FA2	Revenue Factor ($)	$14,230,927		
	FA	Funds Available ($) (Lesser of FA1 or FA2)	$14,230,927		The lesser of FA1 or FA2 but not less than zero: if (min(FA1,FA2) >= 0, MIN(FA1,FA2),0)
	FARR	Additional Revenue to be Recovered (FX-FA)	$0		=FX-FA
Step 4	**WL**	**Waiver Level (GWH)**	**5,357**		**Equals the lesser of SHP or HE + (FE * (FA / FX))**
	WLP	Waiver level percentage of full SHP	**108%**		Percent of waiver level to full SHP
	CRCE	CRC Energy GWh (EA-WL)	0		= EA-WL (Does not include losses projected at 7.81%)
	CRCEP	CRC level percentage of full SHP	0%		Percent of CRCE to full SHP or CRCE/EA
	CRC	**Cost Recovery Charge (mills/kWh)**	-		**=FARR / (EA * 1000)**

Note: Cash flow projections from the:
Sep 2016, 24-month study

* BFTB based on CRC tier iii: 60% of BFBB (40% decrease), where BFBB is less than $120,000,000 but greater than $90,000,000

Updated: October 15, 2016

FY 2018 CRC Calculation

Aug 2016

			FY 2018		
Step 1	**BFBB**	Basin Fund Beginning Balance ($)	$103,832,000		Projected beginning balance for FY per financial cash flow analysis (FY Beginning Bal * 1000)
	BFTB	Basin Fund Target Balance	$62,299,200	*	Basin Fund Target Balance is Based on "tiered" criteria.
	PAR	Projected Annual Revenue ($) w/o CRC	$204,825,000		Per financial cash flow analysis, (=TOTAL REV *1000)
	PAE	Projected Annual Expense ($) (Excludes WRP)	$215,134,000		Per financial cash flow analysis, (=TOTAL EXP *1000)
	NR	Net Revenue ($)	($10,309,000)		=PAR-PAE
	NB	Net Balance ($)	$93,523,000		=BFBB + NR
Step 2	**EA**	SHP Energy Allocation (GWh)	4,948.78		FY '16 SHP energy allocation excluding project use (=SHP DELIVERIES / 1MIL)
	HE	Forecasted Hydro Energy (GWH)	4,805.11		Projected generation from the most current 24-month study, does not include project use (=NET GEN / 1MIL)
	FE	Forecasted Energy Purchase (GWh)	491		Forecasted Energy Purchase (GWh) from the most current 24-month study (=FIRMING PURCHASES / 1MIL)
	Price	Average price per MWh for purchased power	$28.77		Average price = 60% onpeak + 40% offpeak (=COMP PRICE)
	FX	Forecasted Energy Purchase Expense ($)	$14,117,908		Estimated purchased power costs based upon most current 24-month study (= PURCHASE COST)
Step 3	**FA1**	Basin Fund Balance Factor ($)	$14,117,908		If NB is greater than BFTB then use FA1=FX, if NB is less than BFTB then use FX-(BFTB-NB) Formula is: -IF(NB>BFTB,FX,FX-(BFTB-NB))
					If NR is greater than -(1 - tiered percent) of BFBB then FX, if NR is less than -(1 - tiered percent) of BFBB then, FX+(NR+(tiered percent *BFBB)). Formula is: =IF(NR>-(1 - tiered percent *BFBB),FX,FX+(NR+(1- tiered percent *BFBB)))
	FA2	Revenue Factor ($)	$14,117,908		
	FA	Funds Available ($) (Lesser of FA1 or FA2)	$14,117,908		The lesser of FA1 or FA2 but not less than zero: if (min(FA1,FA2) >= 0, MIN(FA1,FA2),0)
	FARR	Additional Revenue to be Recovered (FX-FA)	$0		=FX-FA
Step 4	**WL**	**Waiver Level (GWH)**	**5,296**		**Equals the lesser of SHP or HE + (FE * (FA / FX))**
	WLP	Waiver level percentage of full SHP	**107%**		Percent of waiver level to full SHP
	CRCE	CRC Energy GWh (EA-WL)	0		= EA-WL (Does not include losses projected at 7.81%)
	CRCEP	CRC level percentage of full SHP	0%		Percent of CRCE to full SHP or CRCE/EA
	CRC	**Cost Recovery Charge (mills/kWh)**	-		**=FARR / (EA * 1000)**

Note: Cash flow projections from the:
Aug 2016, 24-month study

* BFTB based on CRC tier iii: 60% of BFBB (40% decrease), where BFBB is less than $120,000,000 but greater than $90,000,000

Updated: September 15, 2016

FY 2018 CRC Calculation

Jul 2016

			FY 2018		
Step 1	**BFBB**	Basin Fund Beginning Balance ($)	$102,382,000		Projected beginning balance for FY per financial cash flow analysis (FY Beginning Bal * 1000)
	BFTB	Basin Fund Target Balance	$61,429,200	*	Basin Fund Target Balance is Based on "tiered" criteria.
	PAR	Projected Annual Revenue ($) w/o CRC	$206,418,000		Per financial cash flow analysis, (=TOTAL REV *1000)
	PAE	Projected Annual Expense ($) (Excludes WRP)	$216,315,000		Per financial cash flow analysis, (=TOTAL EXP *1000)
	NR	Net Revenue ($)	($9,897,000)		=PAR-PAE
	NB	Net Balance ($)	$92,485,000		=BFBB + NR
Step 2	**EA**	SHP Energy Allocation (GWh)	4,948.78		FY '16 SHP energy allocation excluding project use (=SHP DELIVERIES / 1MIL)
	HE	Forecasted Hydro Energy (GWH)	4,767.79		Projected generation from the most current 24-month study, does not include project use (=NET GEN / 1MIL)
	FE	Forecasted Energy Purchase (GWh)	459		Forecasted Energy Purchase (GWh) from the most current 24-month study (=FIRMING PURCHASES / 1MIL)
	Price	Average price per MWh for purchased power	$30.98		Average price = 60% onpeak + 40% offpeak (=COMP PRICE)
	FX	Forecasted Energy Purchase Expense ($)	$14,228,378		Estimated purchased power costs based upon most current 24-month study (= PURCHASE COST)
Step 3	**FA1**	Basin Fund Balance Factor ($)	$14,228,378		If NB is greater than BFTB then use FA1=FX, if NB is less than BFTB then use FX-(BFTB-NB) Formula is: -IF(NB>BFTB,FX,FX-(BFTB-NB))
					If NR is greater than -(1 - tiered percent) of BFBB then FX, if NR is less than -(1 - tiered percent) of BFBB then, FX+(NR+(tiered percent *BFBB)). Formula is: =IF(NR>-(1 - tiered percent *BFBB),FX,FX+(NR+(1- tiered percent *BFBB)))
	FA2	Revenue Factor ($)	$14,228,378		
	FA	Funds Available ($) (Lesser of FA1 or FA2)	$14,228,378		The lesser of FA1 or FA2 but not less than zero: if (min(FA1,FA2) >= 0, MIN(FA1,FA2),0)
	FARR	Additional Revenue to be Recovered (FX-FA)	$0		=FX-FA
Step 4	**WL**	**Waiver Level (GWH)**	**5,227**		**Equals the lesser of SHP or HE + (FE * (FA / FX))**
	WLP	Waiver level percentage of full SHP	**106%**		Percent of waiver level to full SHP
	CRCE	CRC Energy GWh (EA-WL)	0		= EA-WL (Does not include losses projected at 7.81%)
	CRCEP	CRC level percentage of full SHP	0%		Percent of CRCE to full SHP or CRCE/EA
	CRC	**Cost Recovery Charge (mills/kWh)**	-		**=FARR / (EA * 1000)**

Note: Cash flow projections from the:
Jul 2016, 24-month study

* BFTB based on CRC tier iii: 60% of BFBB (40% decrease), where BFBB is less than $120,000,000 but greater than $90,000,000

Updated: August 15, 2016

FY 2018 CRC Calculation

Jun 2016

			FY 2018		
Step 1	**BFBB**	Basin Fund Beginning Balance ($)	$96,451,000		Projected beginning balance for FY per financial cash flow analysis (FY Beginning Bal * 1000)
	BFTB	Basin Fund Target Balance	$57,870,600	*	Basin Fund Target Balance is Based on "tiered" criteria.
	PAR	Projected Annual Revenue ($) w/o CRC	$208,609,000		Per financial cash flow analysis, (=TOTAL REV *1000)
	PAE	Projected Annual Expense ($) (Excludes WRP)	$219,005,000		Per financial cash flow analysis, (=TOTAL EXP *1000)
	NR	Net Revenue ($)	($10,396,000)		=PAR-PAE
	NB	Net Balance ($)	$86,055,000		=BFBB + NR
Step 2	**EA**	SHP Energy Allocation (GWh)	4,948.78		FY '16 SHP energy allocation excluding project use (=SHP DELIVERIES / 1MIL)
	HE	Forecasted Hydro Energy (GWH)	4,918.32		Projected generation from the most current 24-month study, does not include project use (=NET GEN / 1MIL)
	FE	Forecasted Energy Purchase (GWh)	356		Forecasted Energy Purchase (GWh) from the most current 24-month study (=FIRMING PURCHASES / 1MIL)
	Price	Average price per MWh for purchased power	$29.08		Average price = 60% onpeak + 40% offpeak (=COMP PRICE)
	FX	Forecasted Energy Purchase Expense ($)	$10,352,393		Estimated purchased power costs based upon most current 24-month study (= PURCHASE COST)
Step 3	**FA1**	Basin Fund Balance Factor ($)	$10,352,393		If NB is greater than BFTB then use FA1=FX, if NB is less than BFTB then use FX-(BFTB-NB) Formula is: -IF(NB>BFTB,FX,FX-(BFTB-NB))
	FA2	Revenue Factor ($)	$10,352,393		If NR is greater than -(1 - tiered percent) of BFBB then FX, if NR is less than -(1 - tiered percent) of BFBB then, FX+(NR+(tiered percent *BFBB)). Formula is: =IF(NR>-(1 - tiered percent *BFBB),FX,FX+(NR+(1- tiered percent *BFBB)))
	FA	Funds Available ($) (Lesser of FA1 or FA2)	$10,352,393		The lesser of FA1 or FA2 but not less than zero: if (min(FA1,FA2) >= 0, MIN(FA1,FA2),0)
	FARR	Additional Revenue to be Recovered (FX-FA)	$0		=FX-FA
Step 4	**WL**	**Waiver Level (GWH)**	**5,274**		**Equals the lesser of SHP or HE + (FE * (FA / FX))**
	WLP	Waiver level percentage of full SHP	**107%**		Percent of waiver level to full SHP
	CRCE	CRC Energy GWh (EA-WL)	0		= EA-WL (Does not include losses projected at 7.81%)
	CRCEP	CRC level percentage of full SHP	0%		Percent of CRCE to full SHP or CRCE/EA
	CRC	**Cost Recovery Charge (mills/kWh)**	-		**=FARR / (EA * 1000)**

Note: Cash flow projections from the:
Jun 2016, 24-month study

* BFTB based on CRC tier iii: 60% of BFBB (40% decrease), where BFBB is less than $120,000,000 but greater than $90,000,000

Updated: July 6, 2016

FY 2018 CRC Calculation

May 2016

			FY 2018		
Step 1	**BFBB**	Basin Fund Beginning Balance ($)	$105,835,000		Projected beginning balance for FY per financial cash flow analysis (FY Beginning Bal * 1000)
	BFTB	Basin Fund Target Balance	$63,501,000	*	Basin Fund Target Balance is Based on "tiered" criteria.
	PAR	Projected Annual Revenue ($) w/o CRC	$221,408,000		Per financial cash flow analysis, (=TOTAL REV *1000)
	PAE	Projected Annual Expense ($) (Excludes WRP)	$229,188,000		Per financial cash flow analysis, (=TOTAL EXP *1000)
	NR	Net Revenue ($)	($7,780,000)		=PAR-PAE
	NB	Net Balance ($)	$98,055,000		=BFBB + NR
Step 2	**EA**	SHP Energy Allocation (GWh)	4,948.78		FY '16 SHP energy allocation excluding project use (=SHP DELIVERIES / 1MIL)
	HE	Forecasted Hydro Energy (GWH)	4,835.01		Projected generation from the most current 24-month study, does not include project use (=NET GEN / 1MIL)
	FE	Forecasted Energy Purchase (GWh)	414		Forecasted Energy Purchase (GWh) from the most current 24-month study (=FIRMING PURCHASES / 1MIL)
	Price	Average price per MWh for purchased power	$28.29		Average price = 60% onpeak + 40% offpeak (=COMP PRICE)
	FX	Forecasted Energy Purchase Expense ($)	$11,723,776		Estimated purchased power costs based upon most current 24-month study (= PURCHASE COST)
Step 3	**FA1**	Basin Fund Balance Factor ($)	$11,723,776		If NB is greater than BFTB then use FA1=FX, if NB is less than BFTB then use FX-(BFTB-NB) Formula is: -IF(NB>BFTB,FX,FX-(BFTB-NB))
					If NR is greater than -(1 - tiered percent) of BFBB then FX, if NR is less than -(1 - tiered percent) of BFBB then, FX+(NR+(tiered percent *BFBB)). Formula is: =IF(NR>-(1 - tiered percent *BFBB),FX,FX+(NR+(1- tiered percent *BFBB)))
	FA2	Revenue Factor ($)	$11,723,776		
	FA	Funds Available ($) (Lesser of FA1 or FA2)	$11,723,776		The lesser of FA1 or FA2 but not less than zero: if (min(FA1,FA2) >= 0, MIN(FA1,FA2),0)
	FARR	Additional Revenue to be Recovered (FX-FA)	$0		=FX-FA
Step 4	**WL**	**Waiver Level (GWH)**	**5,249**		**Equals the lesser of SHP or HE + (FE * (FA / FX))**
	WLP	Waiver level percentage of full SHP	**106%**		Percent of waiver level to full SHP
	CRCE	CRC Energy GWh (EA-WL)	0		= EA-WL (Does not include losses projected at 7.81%)
	CRCEP	CRC level percentage of full SHP	0%		Percent of CRCE to full SHP or CRCE/EA
	CRC	**Cost Recovery Charge (mills/kWh)**	-		**=FARR / (EA * 1000)**

Note: Cash flow projections from the:
May 2016, 24-month study
* BFTB based on CRC tier iii: 60% of BFBB (40% decrease), where BFBB is less than $120,000,000 but greater than $90,000,000

Updated: June 15, 2016