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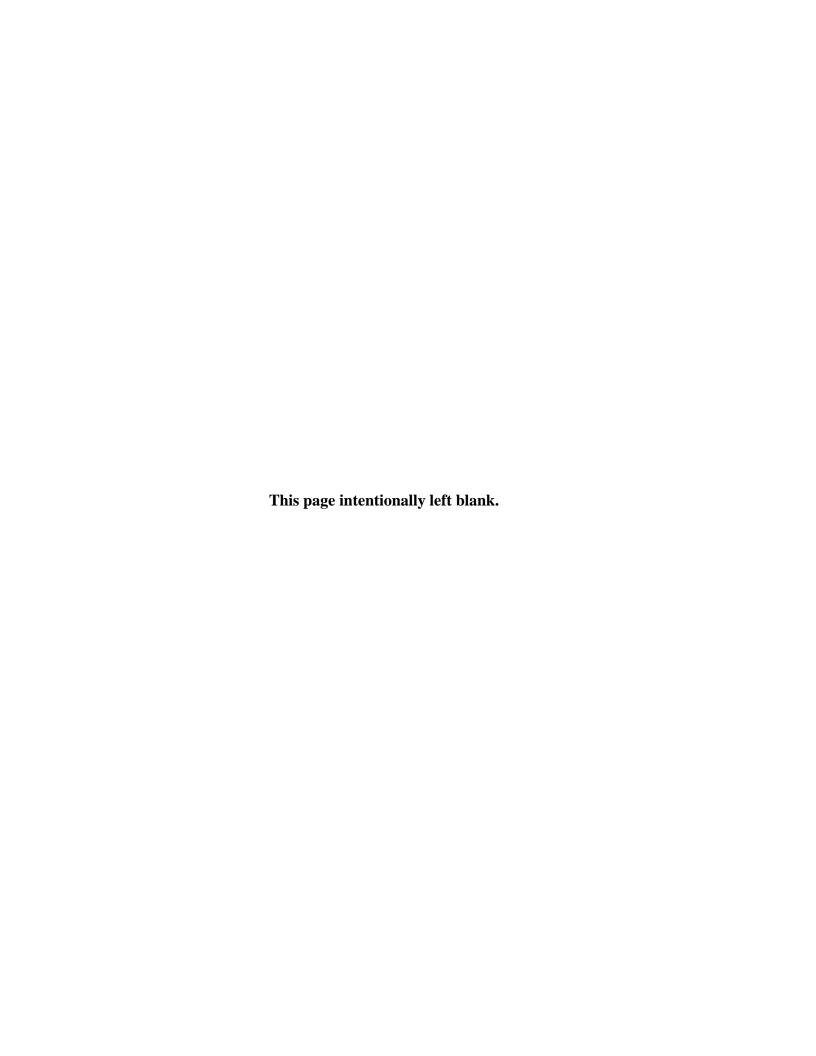
TESTIMONY of

MICHAEL R. NORMANDEAU, BYRNE E. LOVELL, and ARNOLD L. WAGNER

Witnesses for Bonneville Power Administration

SUBJECT: SUPPLEMENTAL RISK MITIGATION

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1		TESTIMONY of
2		MICHAEL NORMANDEAU, BYRNE E. LOVELL, and ARNOLD L. WAGNER
3		Witnesses for Bonneville Power Administration
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5	SUBJI	ECT: SUPPLEMENTAL RISK MITIGATION
6	Section	n 1: Introduction and Purpose of Testimony
7	Q.	Please state your names and qualifications.
8	A.	My name is Michael Normandeau and my qualifications are contained in
9		WP-07-Q-BPA-43.
10	A.	My name is Byrne Lovell and my qualifications are contained in WP-07-Q-BPA-32.
11	A.	My name is Arnold Wagner and my qualifications are contained in WP-07-Q-BPA-50.
12	Q.	What is the purpose of your testimony?
13	A.	The purpose of our testimony is to sponsor the Supplemental Risk Analysis Study
14		(Study), WP-07-E-BPA-48, and the Supplemental Risk Analysis Study Documentation
15		(Documentation), WP-07-E-BPA-48A. Also we describe the risk mitigation tools used in
16		this rate case and the calculation of the probability of BPA making U.S. Treasury
17		(Treasury) payments on time and in full during the one-year rate period for this rate
18		proceeding. This testimony also examines additional Risk Mitigation Tools and efforts to
19		reduce the cost of risk mitigation in rates.
20	Q.	How is your testimony organized?
21	A.	Our testimony includes 11 sections including this introductory section. Section 2
22		summarizes the methodology for calculating the probability of making all Treasury
23		payments in full and on time. Section 3 surveys the risk mitigation tools used in the
24		ToolKit model. Section 4 discusses financial reserves. Section 5 goes over Planned Net
25		Revenues for Risk (PNRR). Section 6 is devoted to the Cost Recovery Adjustment
26		Clause (CRAC). Section 7 describes the NFB Adjustment to the CRAC. Section 8

standard, given the net revenue variability embodied in the distributions of operating and

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1		non-operating risks. ToolKit is used to assess the effects of various policies,
2		assumptions, changes in data, and risk mitigation measures on the level of year-end
3		reserves attributable to generation.
4	Q.	How have you modified the ToolKit Model since the WP-07 Final Proposal?
5	A.	The version of ToolKit used in the WP-07 Supplemental Proposal is very similar to the
6		version used in the WP-07 Final Proposal. The ToolKit reads in two files of risk data,
7		one produced by the RiskMod model that reflects operating risks, and one from the
8		Non-Operating Risk Model (NORM). However, we have modified the Visual Basic for
9		Applications (VBA) code of ToolKit to account for two changes: the IOU REP
10		Settlement is no longer in effect; and the rate period is now a single year (FY 2009)
11		instead of three years (FY 2007-2009.) See Russell, et al., WP-07-E-BPA-67 for an
12		updated discussion of the RiskMod and the NORM and for more details on changes to
13		the ToolKit.
14	Q.	What TPP percentage is BPA targeting with its WP-07 Supplemental Proposal?
15	A.	In this Supplemental Proposal, BPA is implementing its long-standing TPP standard of
16		95 percent. That standard, adopted in 1993 as part of BPA's 10-Year Financial Plan,
17		applies to a two-year rate period. Because the FY 2009 rate period is a one-year period,
18		we must convert the 95 percent TPP for two-year rate periods into the equivalent TPP
19		percentage for a one-year rate period. The one-year equivalent TPP is 97.5 percent.
20	Q.	How do you measure TPP for comparison to its TPP standard?
21	A.	We measure TPP in the ratesetting process used by each business function. The TPP
22		standard is a ratesetting standard, and because BPA now sets rates separately for the
23		power and transmission functions, the TPP test must be made separately also. BPA
24		believes that if each business function is meeting the TPP standard, then the Agency as a
25		whole is ensuring timely payment of its Treasury obligations sufficiently to comply with

1 the thrust of the TPP standard. Therefore, the proposed power rates must meet the one-2 year standard of 97.5 percent. 3 **Section 3: Risk Mitigation Tools in the ToolKit Model** 4 What risk mitigation tools is BPA using to achieve the 97.5 percent TPP standard? Q. 5 A. BPA identified a list of potential risk management tools to be used as part of a 6 comprehensive risk management plan in Supplemental Risk Analysis Study, 7 WP-07-E-BPA-48. The tools that are included in the ToolKit analysis for the 8 Supplemental Proposal are liquidity reserve level, starting Power financial reserves 9 available for risk, temporary availability of Transmission financial reserves, a Cost 10 Recovery Adjustment Clause (CRAC), a Dividend Distribution Clause (DDC), and 11 Planned Net Revenues for Risk (PNRR). These tools address the uncertainties BPA is 12 facing for FY 2008 and 2009, particularly hydro conditions, market prices, operating and 13 non-operating costs, and fish and wildlife costs while assuring that reserves available for 14 risk that are attributed to Power Services do not accumulate to unnecessarily high levels. 15 Q. Does the Supplemental Proposal contain other risk mitigation tools that are not modeled 16 in ToolKit? 17 A. Yes. We are proposing to continue the NFB Adjustment (National Marine Fisheries 18 Service [NMFS] Federal Columbia River Power System [FCRPS] Biological Opinion 19 [BiOp] Adjustment) and the Emergency NFB Surcharge, but are not modeling them or 20 the risks they mitigate. The NFB Adjustment is an upward adjustment to the CRAC 21 Maximum Planned Recovery Amount (Cap) for FY 2009 if unforeseen fish and wildlife 22 costs or financial impacts of operational changes arise from a prescribed set of 23 circumstances in FY 2008 related to the litigation over the FCRPS BiOp. The

Emergency NFB Surcharge mitigates the risks of the same set of possible events that

might occur during FY 2009 should BPA be experiencing a cash crunch during FY 2009.

We are not modeling the impacts of these risk tools or the risks they cover because BPA

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Witnesses: Michael Normandeau, Byrne E. Lovell, and Arnold L. Wagner

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1		would prefer not to model in a rate case the potential independent actions of the Federal
2		court or the possible outcomes of on-going negotiations for long-term agreements
3		regarding fish funding levels. See Section 7 for further discussion of the NFB
4		Adjustment.
5	Q.	What do you mean by a "cash crunch"?
6	A.	A cash crunch is defined as occurring when the Agency Within-year TPP for the fiscal
7		year in which the NFB Trigger Event has occurred is calculated to be less than 80 percent
8		when the financial effects of the Trigger Event, but not the revenues from the NFB
9		Surcharge, are taken into account.
10	Q.	Will the risk mitigation package apply to Slice purchases?
11	A.	No. The Slice product is not subject to the proposed risk mitigation package because
12		Slice customers cover their proportional share of risk by paying actual costs via a true-up
13		mechanism and they receive their proportional share of actual secondary power.
14		
15	Sectio	n 4: Financial Reserves Available for Risk
16	Q.	Please explain the term "starting financial reserves available for risk."
17	A.	Starting financial reserves available for risk comprise cash in the Bonneville Fund and
18		cash equivalents in the form of a deferred borrowing balance at the start of the first fiscal
19		year of the rate period, i.e., FY 2009. Since BPA is setting rates only for power in this
20		rate case, it is only referring to those financial reserves attributable to the generation
21		function.
22	Q.	What does the phrase "available for risk" mean?
23	A.	Some of the reserves attributed to Power Services at the beginning of FY 2008 are not
24		considered to be available for risk because they are virtually certain to be distributed to
25		customers in the near future. These are the reserves that BPA has accumulated due to
26		the cessation in May 2007 of residential exchange benefit payments to the IOUs.

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1	Q.	Does the Supplemental Proposal risk mitigation rely solely upon reserves attributed to
2		Power?
3	A.	Yes, the reserves relied upon are only those reserves available for risk that are attributed
4		to Power, and not other agency reserves, with the exception that the definition of cash
5		crunch involves an assessment of the Agency Within-year TPP.
6	Q.	The temporary availability of other reserves for use in PBL rate-setting was one of the tools
7		in the WP-07 Final Proposal. Why are you not including such reserves in the Supplemental
8		Proposal?
9	A.	The WP-07 Final Proposal assumed some reserves attributed to the Transmission
10		function could be temporarily used by PBL in only one of the three years covered by that
11		PBL rate case, FY 2007. This possibility and the amount was calculated in the
12		Transmission Business Line's TR-06 rate case; no similar amount was determined from
13		Transmission Services' rate cases for other years to be temporarily available to the Power
14		function, therefore we have not assumed that any reserves that are not attributed to Power
15		are available, even temporarily, in the Supplemental Proposal.
16		
17	Sectio	n 5: Planned Net Revenues for Risk
18	Q.	What is the role of Planned Net Revenues for Risk?
19	A.	BPA often includes PNRR as a component of the revenue requirement to bolster reserves
20		to mitigate the impacts of operating and non-operating risks. However, in this
21		Supplemental Proposal, we are not proposing to include PNRR. The rate period
22		comprises only a single year, which reduces the total amount of risk to be mitigated, and
23		the projections of starting reserves available for risk are unusually robust. These
24		reserves, combined with a modest CRAC (see next section,) are sufficient to meet BPA's
25		TPP standard without reliance on PNRR.
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1	Section	n 6: Cost Recovery Adjustment Clause (CRAC)
2	Q.	Is the CRAC in the Supplemental Proposal similar to the CRAC in the WP-07 Final
3		Proposal?
4	A.	Yes. It is a temporary upward adjustment to the power rates if forecast Accumulated
5		Modified Net Revenues (AMNR) fall below the threshold shown on Table A,
6		Attachment 1. The adjustment will be made by a percentage increase in light load hour
7		(LLH), heavy load hour (HLH) energy and load variance rates. See Supplemental
8		Wholesale Power Rate Development Study (WPRDS), WP-07-E-BPA-49.
9	Q.	Please explain the timing of the CRAC adjustment.
10	A.	Before the end of FY 2008, BPA will determine if the forecast of year-end AMNR is
11		below the CRAC threshold for the CRAC applying to FY 2009. If AMNR is below the
12		threshold, BPA will adjust energy rates for FY 2009. The adjustment will be a
13		percentage increase to the applicable posted rates. This initial proposal does not call for a
14		forecast of AMNR to be made in FY 2009, since the next year, FY 2010, is outside the
15		rate period, and any CRAC that might apply to FY 2010 would be described in the rate
16		case for that subsequent rate period.
17	Q.	How was the CRAC threshold derived?
18	A.	The threshold was originally discussed in terms of reserves because reserves are easier
19		for many people to relate to BPA's financial position. BPA determined in the WP-07
20		Final Proposal that approximately \$750 million was an appropriate threshold level
21		because it represented an appropriate compromise between a lower threshold that would
22		trigger less frequently but require higher PNRR, and a higher threshold with higher total
23		CRAC revenues but a lower level of PNRR. We propose to continue to use \$750 million
24		of reserves available for risk as the CRAC threshold in this Supplemental Proposal.

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1	Q.	Why is \$36 million the maximum recovery amount instead of \$300 million?
2	A.	Because the projections of reserves available for risk are unusually robust, and this is a
3		one-year rate period instead of a three-year rate period, a \$36 million cap is sufficient to
4		meet the 97.5 percent TPP standard without relying on PNRR with the risks of FY 2008
5		and FY 2009 that we have modeled.
6	Q.	What would be the effect of changing the maximum recovery amount of the CRAC?
7	A.	If the cap were increased above \$36 million, the TPP would be higher than the targeted
8		standard of 97.5 percent; if the cap were decreased below \$36 million, the TPP would be
9		below the targeted TPP standard and PNRR would have to be added to the revenue
10		requirement.
11	Q.	How is the total amount to be recovered through the CRAC adjustment determined?
12	A.	The total amount to be recovered through the CRAC adjustment is the lesser of the
13		amount by which AMNR is below the threshold and the maximum recovery amount
14		shown in Attachment 1, Table A.
15	Q.	How is the amount of rate increase calculated?
16	A.	The CRAC amount will be recovered from the energy rates subject to the CRAC, which
17		would both increase revenues from adjustable power rate sales and decrease the REP
18		payments to exchanging utilities by increasing the PF Exchange rate.
19	Q.	Please explain the CRAC Revenue Basis.
20	A.	The CRAC Revenue Basis is the total LLH and HLH generation revenue for products and
21		benefits that are subject to the CRAC, based on the most current revenue forecast
22		available in September 2008 for FY 2009.
23	Q.	How will the CRAC percentage be applied to customer bills?
24	A.	The CRAC percentage will be applied as a mills/kWh rate to the customer's HLH and
25		LLH energy and load variance rates. The CRAC adjustments will be shown as separate

1		line items on each customer's bill. See Bolden, et al., WP-07-E-13-BPA, for an
2		explanation about the CRAC application to the demand rate.
3	Q.	Will there be a true-up of the CRAC?
4	A.	No. The CRAC adjustment to the rates is made based on the CRAC percentage
5		calculated prior to the start of the fiscal year with no true-up. Any over-collection or
6		under-collection due to changes between the third quarter review and the end of the fiscal
7		year will be addressed in the next fiscal year's analysis of the need for a CRAC.
8	Q.	Is the CRAC robust enough to mitigate all of BPA's risk?
9	A.	It is robust enough to meet BPA's TPP standard without any reliance on PNRR for the
10		FY 2009 rate period; this does not eliminate or totally mitigate risk, because the TPP
11		standard allows a 2.5 percent chance of a Treasury deferral in FY 2009.
12		
13	Sectio	on 7: The NFB Adjustment and the Emergency NFB Surcharge
14	Q.	Are fish and wildlife issues being handled in the TPP modeling in a fashion similar to the
15		approach in the WP-07 Final Proposal?
16	A.	Yes. A base river operation is used in RiskMod, and a base F&W program is reflected in
17		the revenue requirement. Then some uncertainty over some program elements is
18		modeled in NORM (BPA direct program costs, and U.S. F&WS Lower Snake River
19		Hatcheries. See Risk Analysis Study, WP-07-E-BPA-48, Section 2.5.3.7.
20	Q.	Are the fish issues that are not modeled being treated the same as in the WP-07 Final
21		Proposal?
22	A.	Yes. The WP-07 Final Proposal included both the NFB Adjustment and the Emergency
23		NFB Surcharge, and this Supplemental Proposal also includes both.
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1	Sectio	n 8: Dividend Distribution Clause (DDC)
2	Q.	Is the DDC in this Supplemental Proposal similar to the DDC in the WP-07 Final
3		Proposal?
4	A.	Yes. It is virtually identical, except that the threshold as measured in AMNR is different
5		The starting point for this threshold is the same level of reserves available for risk,
6		\$1,050 million. The threshold measured in AMNR is now \$218.6 million.
7		
8	Sectio	n 9: Modified Net Revenue
9	Q.	Have changes been made to the manner in which BPA calculates Modified Net Revenue
10		(MNR) or Accumulated Modified Net Revenue (AMNR)?
11	A.	No, they are calculated in the same way as in the WP-07 Final Proposal.
12		
13	Sectio	n 10: Additional Risk Mitigation Tools and Efforts
14	Q.	Are there other risk mitigation efforts currently underway that are not included in this
15		analysis?
16	A.	No. If significant issues are raised in the parties' testimony regarding risk mitigation,
17		BPA would consider changes to its risk mitigation approach as necessary.
18		
19	Sectio	n 11: The Relationship of the Proposed NFB Rate Provisions to the Current
20		NFB Rate Provisions
21	Q.	What is an NFB Trigger Event?
22	A.	According to language agreed to in meetings with customers and other parties during the
23		WP-07 rate proceeding, an NFB Trigger Event is an event of one of the following four
24		events that results in changes to BPA's FCRPS Endangered Species Act (ESA)
25		obligations compared to those in the WP-07 Final Proposal as modified prior to this
26		Trigger Event:

1		(1)	A court order in National Wildlife Federation vs. National Marine Fisheries
2			<u>Service</u> , CV 01-640-RE, or any appeal thereof ("Litigation");
3		(2)	An agreement (whether or not approved by the Court) that results in the resolution
4			of issues in, or the withdrawal of parties from, the Litigation;
5		(3)	A new NMFS FCRPS BiOp; or
6		(4)	A BPA commitment to implement Recovery Plans under the ESA that results in
7			the resolution of issues in, or the withdrawal of parties from, the Litigation.
8	Q.	Нош и	vould an NFB Trigger Event affect rates?
9	A.	It depe	ends on when the NFB Trigger Event occurs and whether BPA is in a cash crunch
10		or not	(this is what determines whether an NFB Trigger Event might lead to an NFB
11		Adjust	tment for the following year or an Emergency NFB Surcharge for the current
12		year).	If BPA is in a cash crunch when the NFB Trigger Event occurs, then we will
13		follow	the GRSPs for possible implementation of an Emergency NFB Surcharge. We
14		are no	t proposing to change the procedure specified in the GRSPs governing Emergency
15		NFB S	Surcharges, so we would undertake the same sequence of actions whether an NFB
16		Trigge	er Event occurs at the time of a cash crunch in FY 2008 or FY 2009.
17	Q.	What v	would happen if an NFB Trigger Event occurs in FY 2009 and BPA is not in a cash
18		crunch	1?
19	A.	The pr	roposed rates do not provide for any response to those circumstances because the
20		condit	ions for applying an Emergency NFB Surcharge to FY 2009 rates would not have
21		been n	net, and any NFB Adjustment that might ensue would occur in FY 2010, and BPA
22		is not j	proposing any rates that apply to that year.
23	Q.	OK. V	What would happen if an NFB Trigger Event occurs in FY 2008 and BPA is not in a
24		cash c	runch?
25	A.	To ans	swer that, let's look in more detail at the timing of the calculations for an NFB
26		Adjust	tment to FY 2009 rates. The current GRSPs call for calculations in August 2008,

A.

at essentially the same time as the calculations for determining whether there will be a CRAC or DDC during FY 2009; we are proposing to change this to early September in this Supplemental Proposal. In either case, BPA will be analyzing the financial impacts in the August-September time frame along with the CRAC/DDC calculations. If BPA anticipates that the proposed rates will receive interim approval from the Federal Energy Regulatory Commission by October 1, 2008, BPA will use the proposed GRSPs to analyze the financial impacts of the NFB Trigger Event to determine how much of a change to the CRAC cap to make, and the financial impact will be calculated in reference to the operation and program for FY 2008 that were assumed in the final Supplemental Proposal. On the other hand, if BPA anticipates that the current rates will be in effect on October 1, 2008, BPA will use the current GRSPs to make the NFB and CRAC calculations, and the financial impact will be calculated in reference to the FY 2008 operation and program, as adjusted, that were assumed in the WP-07 Final Proposal.

- Q. What does "as adjusted" mean?
 - It means that the fish and wildlife operation or fish and wildlife program (or both) that BPA is implements in a fiscal year (*e.g.*, FY 2008) may not be exactly the same as that assumed in the most recent rate case final proposal (*e.g.*, the WP-07 Final Proposal), because BPA may have modified that operation and program after completing the relevant final proposal that is, the baseline for the "before" part of the NFB Trigger Event impact calculation may have changed. The possibility of changes to the baseline was foreseen during the design of the NFB mechanisms and the writing of the WP-07 Final Proposal GRSPs. The baseline needs to include the possibility of change because customers feared that BPA could voluntarily make changes to the operation and program that would increase expenses, and then, if an NFB Trigger Event occurred, roll the voluntary changes in with the litigation-related changes and increase rates more than

1	Q.	Doesn't this mean that the net revenue impacts of this NFB Trigger Event are missed,
2		and are not recovered?
3	A.	No, they are fully recovered. By incorporating the FY 2008 effects into the modeling of
4		FY 2008, which affects FY 2009 starting reserves, and incorporating the FY 2009
5		effects into the revenue requirement for the FY 2009 rates, and then ensuring that the
6		FY 2009 rates meet BPA's TPP standard, the financial impacts of the NFB Trigger
7		Event on both FY 2008 and FY 2009 are fully accounted for in the revised FY 2009
8		rates.
9	Q.	Will BPA still go through the formal process of calculating an NFB Adjustment to the cap
10		on the CRAC if there isn't likely to be a CRAC?
11	A.	No. In the August-September calculations, BPA will calculate first whether a CRAC
12		will trigger. If the CRAC will not trigger, then an NFB Adjustment would have no
13		impact, and BPA will not necessarily calculate the financial impacts of an NFB Trigger
14		Event with the rigor that would be needed if it were to affect rates.
15	Q.	Could an FY 2008 NFB Trigger Event affect rates in both FY 2008 and FY 2009?
16	A.	Yes, there are two scenarios in which this could happen. First, an NFB Trigger Event in
17		FY 2008 could come when there is a cash crunch, but there isn't enough time remaining
18		in FY 2008 to collect additional revenue equal to the magnitude of the financial impact
19		of the NFB Trigger Event. Then the balance of the financial impact could result in an
20		NFB Adjustment to the FY 2009 CRAC cap.
21		Second, an NFB Trigger Event could occur that affects operations or program
22		elements in both FY 2008 and FY 2009. This could lead to what was termed a
23		"deemed" Trigger Event in the WP-07 Final Proposal: as soon as FY 2009 begins, an
24		NFB Trigger Event is deemed to have occurred in FY 2009; the event actually occurred
25		in FY 2008, but has effects on FY 2009 financial results. Both the original and the

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	not it would result in changes to BPA's FCRPS obligations compared to those in the
	final Supplemental Proposal remain uncertain.
Q.	Are there other Biological Opinions being litigated that could affect BPA's fish and
	wildlife costs?
A.	Yes, there is on-going litigation regarding the issuance of a BiOp for the Willamette
	Valley Projects of the FCRPS, and on-going litigation regarding a BiOp for the Libby
	Project.
Q.	Would either of these cases or BiOps be covered under the NFB clauses?
A.	No, by their terms, NFB clauses are limited to events relating to the litigation over ESA
	obligations in the National Wildlife Federal v National Marine Fisheries Service case
	only.
Q.	Have you considered modifying the NFB Adjustment clause and the Emergency NFB
	Surcharge to cover litigation over these other BiOps?
A.	Yes, we considered this, but determined it was not needed for this FY 2009 rate period.
	We believe it is highly unlikely that financial impacts from either BiOp could decrease
	BPA's net revenue very substantially during FY 2009. We could, however, consider
	modifying or expanding the NFB clauses in future rate cases if determined necessary or
	appropriate.
Q.	Does this conclude your testimony?
A.	Yes.
	A.Q.A.Q.

Attachment 1

Table A: CRAC Annual Thresholds and Caps

[Dollars in millions]

AMNR Calculated at end of Fiscal Year	CRAC Applied to Fiscal Year	CRAC Threshold	Approx. Threshold as Measured in PS Reserves	Maximum CRAC Recovery Amount (Cap)
2008	2009	-\$81.4	\$750	\$36

Table B: DDC Thresholds

[Dollars in millions]

AMNR Calculated at End of Fiscal Year	DDC Applied to Fiscal Year	DDC Threshold in AMNR	Approx. Threshold as Measured in PS Reserves
2008	2009	\$218.6	\$1,050