### UNCLASSIFIED – CLEARED FOR PUBLIC RELEASE DEPARTMENT OF ENERGY - Bonneville Power Administration Transition Plan for 1755-1780 MHz Band

# Department of Energy (DOE) Bonneville Power Administration Transition Plan for the 1755-1780 MHz Band

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Certification regarding Classified and Sensitive Information:

### DEPARTMENT OF ENERGY - Bonneville Power Administration Transition Plan for 1755-1780 MHz Band STEVE GOLISCH - TECT Tab B: General Information

1	This Transition Plan includes pre-auction planning costs, as defined in Section O.2 of Annex O:			
	a. Total pre-auction planning costs:	\$0.00		
		70.00		
	b. The subtotal amount, if any, of pre-auction planning costs requested for pre-auction transfer:	\$0.00		
	c. The subtotal amount, if any, of pre-auction planning costs incurred after June 28, 2010, but before			
	February 22, 2012:	\$0.00		
	d. This organization attests that:			
	[1] This transition plan provides for sharing and coordination of eligible frequencies with non-federal			
	users, including reasonable accommodation for the use of eligible frequencies by non-federal users during			
	the transition period.	Yes		
	[2] This transition plan provides for non-federal users to be able to use eligible frequencies during the			
	transition period in geographic areas where this organization does not use such frequencies.	Yes		
	[3] During the transition period, this organization will make itself available for negotiation and discussion			
	with non-federal users not later than 30 days after a written request.	No		
	[4] During the transition period, this organization will make available to a non-federal user with			
	appropriate security clearances any classified information regarding the relocation process, on a need-to-			
	know basis.	Yes		
	[5] (Only applicable if the amount in 1b above is greater than \$0.00.) Funds transferred before an			
	auction likely allow for timely implementation of relocation or sharing, thereby increasing net expected			
	auction proceeds by an amount not less than the time value of the amount of funds transferred.	Yes		
2	There is additional information required to be included in the Transition Plan that is not included in this			
	document because it is classified information, as defined in Section O.7 of Annex O.	No		
3	There is additonal information required to be included in the Transition Plan that is not included in this			
	document because it is <u>sensitive</u> information, as defined in Section O.7 of Annex O.	No		
	a. Name of Responsible Officer:	Steven Golisch		
4	b. (Optional) Office:	Telecommunications Design Grou		
	c. (Optional) Telephone Number:	360-619-6561		
	d. (Optional) E-mail:	scgolisch@bpa	ı.gov	
5	Total Transition Plan Cost (\$M):	\$6.80		

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Tab C: Abstract

Serial Number	Center Freq./ Lower Band Limit (MHz)	Upper Band Limit (MHz) (if appl)	Emission Bandwidth (20 dB) (MHz)	Rx IF Bandwidth (3 dB) (MHz)	Bureau	System Use	System Name	Authorized Area of Operation	TX State	TX Latitude	TX Longitude	RX State	RX Latitude	RX Longitude	Sharing	Alternate Frequency Assignment	Transition Timeline (Months)
DOE 786122	1765	N/A	8	2	BPA	Microwave	T	N/A	OR	453423N	1224727W	WA	453905N	1224339W	None	N/A	30
DOE 924929	1765	N/A	10	2	BPA	Microwave	3A	N/A	OR	454041N	1204410W	WA	454345N	1204224W	None	N/A	30
DOE 945250	1757.5	N/A	0.8	2	BPA	Microwave	4K	N/A	OR	434625N	1201654W	OR	434841N	1205229W	None	N/A	30
DOE 945254	1767.5	N/A	0.8	2	BPA	Microwave	4K	N/A	OR	433034N	1190725W	OR	433332N	1190909W	None	N/A	30
DOE 955040	1777.5	N/A	0.8	2	BPA	Microwave	13A	N/A	WA	461351N	1190234W	WA	461543N	1191722W	None	4 GHz	30
DOE 955303	1767.5	N/A	1	2	BPA	Microwave	3K	N/A	CA	412458N	1210632W	CA	413050N	1203813W	None	7-8 GHz	30
DOE 984990	1775	N/A	1	2	BPA	Microwave	3D	N/A	WA	471909N	1201423W	WA	470618N	1193144W	None	N/A	30

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#### Tab D: Transition Timeline

			Timeline (Months after Auction)								
Serial Number	Geographic Location (Service Area)	Begin Temporary Sharing	Begin Indefinite Sharing	Vacate Assignment							

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Tab E: Plan and Timeline for using Funds (SRF)

System Name	System ID	Pre-Auction Costs Incurred between 6-28-2010 and 2-22-2012	Equipment- Related Costs (\$M)	Deployment- Related Costs (\$M)	Total Cost for System (\$M)	Begin Expenditure of Funds	End Expenditure of Funds	Costs Associated with Expanded Capability	Description of Expanded Capability	Explanation/ Justification
Т	DOE-1	0.000	0.050	0.050	0.100	1	30			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
3A	DOE-2	0.000	0.050	0.050	0.100	1	30			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
4K-1	DOE-3	0.000	0.050	0.050	0.100	1	30			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
4K-2	DOE-4	0.000	0.050	0.050	0.100	1	30			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
13A	DOE-5	0.000	0.420	1.980	2.400	1	48	\$20,000	Expand channel capacity to 16 DS1	Expanded channel capacity to 16 each DS1 will provide sufficient capacity to meet existing telecommunication circuit needs including Teleprotection, SCADA, Telemetering, Site Security, Voice, IT and future Smart Grid applications to control and operate the power transmission grid per Western Electric Coordinating Council (WECC) and North America Electric Reliability Council -Critical Infastructure Protection (NERC-CIP) requirements.
зк	DOE-6	0.00	0.42	1.98	2.40	1	48	\$20,000	Expand channel capacity to 16 DS1	Expanded channel capacity to 16 each DS1 will provide sufficient capacity to meet existing telecommunication circuit needs including Teleprotection, SCADA, Telemetering, Site Security, Voice, IT and future Smart Grid applications to control and operate the power transmission grid per Western Electric Coordinating Council (WECC) and North America Electric Reliability Council -Critical Infastructure Protection (NERC-CIP) requirements.
3D	DOE-7	0.00	0.00	0.00	0.00					BPA is funding the relocation of this microwave point- to-point path with a new digital microwave or fiber technology
DOE HQ	DOE-8	0.00	0.00	1.60	1.60					HQ Administration of 1755-1780 Relocation Program.

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#### Tab F: NTIA Interactions

	Interaction required with NTIA to implement this Transition Plan
1	NTIA will need to work closely with the Federal frequency assignment incumbent to determine new frequency assignments in the alternate bands including the 1780-1850 MHz, 4 GHz and 7/8 GHz bands for point-to-point microwave.

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Tab G: Identification of Excluded Classified and Sensitive Information

Serial Number	Description of Classified or Sensitive Information	Reason for Exclusion	Reference

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### Tab H: Factors that could Impact Fulfillment of Transition Plan

	Factor	Impact on Fulfillment of Transition Plan
	•	The relocation effort for all sites listed for vacating are subject to extreme weather conditions
		during winter months which can delay the deployment of new equipment installation including
1		towers, antenna and RF microwave radio systems.
	Frequency assignments in the 1755-1850	move out of the 1755-1780 MHz spectrum. Thus, the need to receive the 1780-1850 MHz
2	MHz band.	frequency assignments in a timely manner.
	Frequency assignments in the 4 GHz and 8	move out of the 1755-1780 MHz spectrum. Thus, the need to receive the 4 GHz and 8 GHz
3	GHz band.	frequency assignments in a timely manner.

### DEPARTMENT OF ENERGY - Bonneville Power AdministrationTransition Plan for 1755-1780 MHz Band S. GOLISCH - TECT Tab I: Additional Information

Serial Number	Center Freq./ Lower Band Limit (MHz)	Paired RX Serial Number	Paired RX Frequency	PairedRX State	Paired Service Area (RX)	Alternate Frequency Assignment Transitio Timelin (Months		Cost (\$M)	Note
DOE 786122	M1765	DOE 786123	M1825	WA	167	N/A	30	0.10	1,3&4
									,
DOE 924929	M1765	DOE 786106	M1825	WA	167	N/A	30	0.10	1,3&4
DOE 945250	M1757.5	DOE 945249	M1817.5	OR	167	N/A	30	0.10	1,3&4
DOE 945254	M1767.5	DOE 945253	M1827.5	OR	150	N/A	30	0.10	1,3&4
DOE 955040	M1777.5	DOE 955039	M1837.5	WA	169	4 GHz	30	2.40	1 &2
DOE 955303	M1767.5	DOE 955305	M1827.5	CA	165	7-8 GHz	30	2.40	1 &2
DOE 984990	M1775	DOE 984991	M1835	WA	169	N/A	30	0.00	1,3&4

#### Notes:

- 1. BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
- 2. Cost funding listed for frequency assignment pair covers total point-to-point microwave replacement cost.
- 3. BPA is funding the relocation of this microwave point-to-point path with a new digital microwave or fiber technology.
- 4. Assignments that are specified as 'N/A' in the Alternate Frequency Assignment column have exisitng frequency assignments in either the 4 GHz or 7-8 GHz band.