#### DOE\BPA 1755-1780 (Rev. 0) (Sufficient)

Submitted: 7/3/2014

Approved: 11/2/2015

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DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Freq-Geo Transition Timeline

Serial Number	System Name	Center Lower Frequency (MHz)	Upper Frequency (MHz)	Emission Bandwidth (MHz)	Receiver Bandwidth	System Use Type Name	Operation Area	Transmitter State	Transmitter Latitude	Transmitter Longitude
DOE786122	Т	1765		8	2	Microwave	Microwave Link	OR	453423N	1224727W
DOE924929	3A	1765		10	2	Microwave	Microwave Link	OR	454041N	1204410W
DOE945250	4K-1	1757.5		0.8	2	Microwave	Microwave Link	OR	434625N	1201654W
DOE945254	4K-2	1767.5		0.8	2	Microwave	Microwave Link	OR	433034N	1190725W
DOE955040	13A	1777.5		0.8	2	Microwave	Microwave Link	WA	461351N	1190234W
DOE955303	3K	1767.5		1	2	Microwave	Microwave Link	CA	412458N	1210632W
DOE984990	3D	1775		1	2	Microwave	Microwave Link	WA	471909N	1201423W

#### DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Freq-Geo Transition Timeline

Releasable

Serial Number	Receiver State	Receiver Latitude	Receiver Longitude	Alternate Frequency Assignment	Geographic Location associated with Timeline	Sharing Type	Indefinite Sharing Timeline (Months after 1/30/15)	Temporary Sharing Timeline (Months after 1/30/15)	Vacate Assignment Timeline (Months after 1/30/15)
DOE786122	WA	453905N	1224339W	TBD	EA 167	None			30
DOE924929	WA	454345N	1204224W	TBD	EA 167	None			30
DOE945250	OR	434841N	1205229W	TBD	EA 167	None			30
DOE945254	OR	433332N	1190909W	TBD	EA 150	None			30
DOE955040	WA	461543N	1191722W	4 GHz	EA 169	None			30
DOE955303	CA	413050N	1203813W	7-8 GHz	EA 165	None			30
DOE984990	WA	470618N	1193144W	TBD	EA 169	None			30

DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Funds

System Name	Total Pre- Auction Cost (\$M)	Pre-Auction Transfer Requested (\$M)	Pre- Auction Cost Pre- 2012 (\$M)	Equipment Cost (\$M)	Deployment Cost (\$M)	Total Cost (\$M)	Begin Expenditure Timeline (Months)	End Expenditure Timeline (Months)
13A	0.0000	0.0000	0.0000	0.4200	1.9800	2.4000	1	48
3A	0.0000	0.0000	0.0000	0.0500	0.0500	0.1000	1	30
3D	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
3К	0.0000	0.0000	0.0000	0.4200	1.9800	2.4000	1	48
4K-1	0.0000	0.0000	0.0000	0.0500	0.0500	0.1000	1	30
4K-2	0.0000	0.0000	0.0000	0.0500	0.0500	0.1000	1	30
Headquarters Overhead	0.0000	0.0000	0.0000	0.0000	1.6000	1.6000	1	48
т	0.0000	0.0000	0.0000	0.0500	0.0500	0.1000	1	30
Total	0.0000	0.0000	0.0000	1.0400	5.7600	6.8000		

# DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Funds

System Name	Expanded Capability Cost (\$M)	Expanded Capability Description	Expanded Capability Justification
13A	0.0200	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.
3A			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
3D			BPA is funding the relocation of this microwave point-to-point path with a new digital microwave or fiber technology
ЗК	0.0200	Expand channel capacity to 16 DSI	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.
4K-1			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
4K-2			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
Headquarters Overhead			Costs required for oversight and program management at Headquarters DOE.
Т			BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
Total	0.0400		

# DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Interactions

Interaction Name	Interaction Description						
Alternate Bands	BPA will be seeking permanent frequency assignments in the 4 GHz and 8 GHz band in order to move out of the 1755-1780 MHz						
1. Alternate bands	spectrum. Thus, the need to receive the 4 GHz and 8 GHz frequency assignments in a timely manner.						
2. Freq	BPA will be seeking temporary frequency assignments in the 1780-1850 MHz band in order to move out of the 1755-1780 MHz						
Assignments	spectrum. Thus, the need to receive the 1780-1850 MHz frequency assignments in a timely manner.						
3. Weather	The relocation effort for all sites listed for vacating are subject to extreme weather conditions during winter months which can delay						
Complications the deployment of new equipment installation including towers, antenna and RF microwave radio systems.							

# DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Impact Factors

Factor Name	Factor Description
Freq	NTIA will need to work closely with the Federal frequency assignment incumbents to determine new frequency assignments in the
Assignments	alternate bands including the 1780-1850 MHz, 4 GHz and 7/8 GHz bands for point-to-point microwave.

# DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Notes

Note Name	Note Text
1. Note 1	BPA will temporarly relocate the existing frequency assignments from the 1755-1780 MHz band to the 1780-1850 MHz band.
2. Note 2	DOE 955040 (Paired with DOE 955039) and DOE 955303 (Paired with DOE 955305): Cost funding listed for frequency assignment
2. Note 2	pair covers total point-to-point microwave replacement cost.
3. Note 3	All other assignments: BPA is funding the relocation of this microwave point-to-point path with a new digital microwave or fiber
3. Note 3	technology.
	[Serial Number - Center Freq./Paired RX Serial Number -Paired RX Frequency (RX State)]
	[DOE 786122 - M1765 / DOE 786123 - M1825 (WA)]
	[DOE 924929 - M1765 / DOE 786106 - M1825 (WA)]
4. Paired Serial	[DOE 945250 - M1757.5 / DOE 945249 - M1817.5 (OR)]
Numbers	[DOE 945254 - M1767.5 / DOE 945253 - M1827.5 (OR)]
	[DOE 955040 - M1777.5 / DOE 955039 - M1837.5 (WA)]
	[DOE 955303 - M1767.5 / DOE 955305 - M1827.5 (CA)]
	[DOE 984990 - M1775 / DOE 984991 - M1835 (WA)]

# DOE\BPA 1755-1780 (Rev. 0) (Sufficient) - Excluded Info

Table	Row	Column	Agency Marking	Reference
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