Appendix B – Phase 1 Bog Turtle Survey Habitat Evaluation Forms

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form (revised 06/01/2006)

Project/Property Name: Cricket Valley
Project type: Industrial Development
Applicant/Landowner Name: Advanced Power NA
County: Dutchess Quad: Dover Plains Township/Municipality: Dover
PNDI# Potential conflict with USFWS species? \(\sigma \text{Y} \sigma \text{N}\)
pH = 7.2
ACTION AREA ² Action area size: $\frac{\sim 131 \text{ ac}}{\text{Ac}}$, Does the Phase 1 survey include all wetlands in the action area? $\frac{\sim}{2}$ Y $\frac{\sim}{2}$ No WETLAND ID: $\frac{1}{2}$ PHOTOS TAKEN: $\frac{\sim}{2}$ Yes $\frac{\sim}{2}$ No WETLAND SIZE: $\frac{1}{2}$ acres Wetland size estimation – If actual acreage is not known at time of investigation, check one: $\frac{\sim}{2}$ < 0.1 acres $\frac{\sim}{2}$ 0.1 -0.5 acres $\frac{\sim}{2}$ >0.5 to <1 acres $\frac{\sim}{2}$ 1-2 acres $\frac{\sim}{2}$ 2-4 acres $\frac{\sim}{2}$ 5+ acres $\frac{\sim}{2}$ 10+ acres
WETLAND LOCATION: Lat 41°40'39"N Long 73°34'43"W (approximate center of wetland) GPS Datum (check one): D NAD 27 NAD 83 D WGS 84
SURVEY CONDITIONS & LIMITATIONS
Date of survey: 6/23/09 Time In: 11:15 Time Out: 1.15 Last precipitation: 2<24 hours 1-7 days > 1 week unknown Drought conditions? YN Unknown
How much of this wetland is located off-site (i.e., outside the property boundaries or right-of-way)? In one of it — the entire wetland is within the property boundaries (skip next 2 questions) I some of it — acres or% of the wetland appears to be located off-site
If part of this wetland continues off-site, how much of the off-site portion was surveyed (on foot)? \[\textstyle \text{none of it} \textstyle \text{all of it} \textstyle \text{part of it} \(\begin{subarray}{cccccccccccccccccccccccccccccccccccc
How much of the off-site portion of this wetland is visible (e.g., from the subject property or from a public road)? all of it part of it (at least acres) in none of it
Are there any wetlands located off-site and close enough to be affected by this project? $\square Y \square N \boxtimes Unknown$ If yes, could they be potential bog turtle habitat? $\square Y \square N \boxtimes Unknown$
Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.): Forest, old industrial
WETLAND CHARACTERISTICS
Wetland type(s) present and % cover: ☑ PEM 85 ☑ PSS 5 ☑ PFO 5 ☑ POW 5
 ✓ Y □ N Are there any signs of disturbance to hydrology (ditching, filling, ponds, roads, etc.)? If yes, describe bey ms, debris, dumping activity □ Y ☒ N Are there any signs of disturbance to vegetation (mowing, pasturing, burning, etc.)? If yes, describe
Y M N Are there any signs of disturpance to vegetation (mowing, pasturing, ourling, etc.)? It yes, describe

Soils Mapping	Springs or seeps \(\subseteq \forall \forall \text{likely} ?\) Spring houses in or adjacent to wetland? Saturated soils present? If yes, year-round Water visible on surface? Check all that apprivalets (" deep) \(\text{M} \text{larger pools/p} \) Evidence of flooding? If yes, describe ind Unit (optional): ns confirm mapped type? \(\sup \text{YES} \) \(\sup \text{NC} \)	1? Delikely Unlike pply: I small puddles conds (18" deep) dicators standing to doesn't	ely Unknown s/depressions (" deep)
	ortion of Wetland		4. minut
Mucky⁴? ☐ YES ♥ NO	How much of it (PEM) is mucky ? □ <10% □ 10-29% □ 30-49%	Mucky soils range in depth from:to"	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
Non-mucky ⁶ ? Ø YES □ NO	How much of it (PEM) is non-mucky ? □ <10% □ 10-29% □ 30-49% □ 50-70% □ >70%		8
Soils – PSS an	d PFO Portions of Wetland		y
Mucky ⁴ ?	How much of it is mucky? □ <10% □ 10-29% □ 30-49%	Mucky soils range in depth from:	Most of the mucky part(s) of the wetland can be probed ⁵ :
Wetland Veget	ation (characterize the wetland as a who	to"	□ 3-5" □ 6-8" □ 9-11" □ ≥12"
Wetland Veget Check (X) if pre sedges urus sensitive fern alder adog Additional dom Herptiles Were any bog to Other herptiles	ation (characterize the wetland as a who sent (≥ 5% areal coverage), and also circle shes Skunk cabbage □ cattail □ swee □ rice cutgrass □ tearthumb □ reed carwood □ red maple □ willow □ poison smant species: Unidentified fern eartles observed? □ YES ⁷ ⊠NO If y □ observed □ previously observed:	to" to" to" to" if dominant (≥ 20% control of the standard of the st	overage). □ 3-5" □ 6-8" □ 9-11" □ ≥12" overage). □ sphagnum moss ves) □ purple loosestrife se ☒ ash

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹ (revised 06/01/2006)

Cricket Project/Property Name: Project type: Industrial Applicant/Landowner Name: Advanced County: Dutchess Quad: Dover Plains Township/Municipality: Dover Potential conflict with USFWS species? \(\sigma\) Y \(\sigma\) N PNDI# ACTION AREA² Action area size: $\frac{\times 13 \, \text{lac}}{\text{N}}$, Does the Phase 1 survey include all wetlands in the action area? $\boxtimes Y \cup N^3$ PHOTOS TAKEN: Q Yes Q No WETLAND SIZE: 8.76 acres Wetland size estimation - If actual acreage is not known at time of investigation, check one: □ < 0.1 acre □ 0.1-0.5 acre □ >0.5 to <1 acre □ 1-2 acres □ 2-4 acres □ 5+ acres □ 10+ acres WETLAND LOCATION: Lat 41°40′45″N Long 73°34′53″ W (approximate center of wetland) GPS Datum (check one): □ NAD 27 ☑ NAD 83 □ WGS 84 SURVEY CONDITIONS & LIMITATIONS Date of survey: 6/23/09 Time In: 15 Time Out: 3:30

Last precipitation: Content of survey: 6/23/09 Time In: 15 Time Out: 3:30

Last precipitation: Content of survey: 3:30

Last precipitation: Drought conditions? Drought conditions Dro How much of this wetland is located off-site (i.e., outside the property boundaries or right-of-way)? 🗵 none of it - the entire wetland is within the property boundaries (skip next 2 questions) □ some of it - ____ acres or ____ % of the wetland appears to be located off-site If part of this wetland continues off-site, how much of the off-site portion was surveyed (on foot)? none of it all of it part of it ____ sor ___ acres of the off-site portion) How much of the off-site portion of this wetland is visible (e.g., from the subject property or from a public road)? all of it part of it (at least acres) none of it Are there any wetlands located off-site and close enough to be affected by this project? QY QN D Unknown If yes, could they be potential bog turtle habitat? DY DN & Unknown Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.): Forest, old industrial, railroad tracks WETLAND CHARACTERISTICS Wetland type(s) present and % cover: DPEM 85 DPSS 5 DPFO 5 DPOW 5 MY ON Are there any signs of disturbance to hydrology (ditching, filling, ponds, roads, etc.)? If yes, describe possible filling, vailvoad grade, berms

O Y N Are there any signs of disturbance to vegetation (mowing, pasturing, burning, etc.)? If yes, describe

Project Name Cricket Valley		Wetland (con't)
Springs or seeps visible or likely? Spring houses in or adjacent to wetland? Saturated soils present? If yes, year-round? Water visible on surface? Check all that appring unit (optional):	E Likely □ Unlik ply: □ small puddles onds (/8" deep) cators	ely Unknown
Field observations confirm mapped type? YES NO	☑ Unknown	
Soils - PEM Portion of Wetland	Mucky soils range	Most of the musly neut(s) of
Mucky ⁴ ? How much of it (PEM) is mucky ? □ YES ▼NO □ 10-29% □ 30-49% □ 50-70% □ >70%	in depth from:	Most of the mucky part(s) of the wetland can be probed ⁵ : ⊠ 3-5" □ 6-8" □ 9-11" □ ≥12"
Non-mucky ⁶ ? How much of it (PEM) is non-mucky? □ <10%		
Soils - PSS and PFO Portions of Wetland		
Mucky ⁴ ? How much of it is mucky? □ YES ☑ NO □ 10-29% □ 30-49% □ 50-70% □ >70%	Mucky soils range in depth from: to	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
Other herptiles \(\mathbb{\omega}\) observed \(\mathbb{\omega}\) previously observed:	flag jewelweed ary grass Phragmi umac multiflora ro by cinquefoil es, how many? eg -hosed snake orthe egg shells	☐ sphagnum moss ties ☐ purple loosestrife se ☒ // / s
NVESTIGATOR'S OPINION ☐ YES ☐ NO ☐ UNSURE The hydrology criterion or the soils criterion or the hydrology criterion	bog turtle habitat is m 18 for bog turtle habita	et.
Sarah Shute	tion provided herein i	is accurate and complete.

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form (revised 06/01/2006)

Project/Property Name: Cricket Valley
Project type: Industria Development
Applicant/Landowner Name: Advanced Power NA
County: Dutchess Quad: Dover Plains Township/Municipality: Dover
PNDI#Potential conflict with USFWS species? □ Y □ N
ACTION AREA ² Action area size: $\frac{ \mathcal{A} }{ \mathcal{A} } = \frac{ \mathcal{A} }{ \mathcal$
WETLAND LOCATION: Lat 40'29" N Long 73°34'53" W (approximate center of wetland) GPS Datum (check one): D NAD 27 M NAD 83 D WGS 84
SURVEY CONDITIONS & LIMITATIONS
Date of survey: $\frac{6/23/09}{\text{Last precipitation: } \square < 24 \text{ hours } \square \text{ 1-7 days } \square > 1 \text{ week } \square \text{ unknown}}{\text{Drought conditions? } \square \times \square$
How much of this wetland is located off-site (i.e., outside the property boundaries or right-of-way)? none of it - the entire wetland is within the property boundaries (skip next 2 questions) some of it acres or % of the wetland appears to be located off-site
If part of this wetland continues off-site, how much of the off-site portion was surveyed (on foot)?
How much of the off-site portion of this wetland is visible (e.g., from the subject property or from a public road)? A all of it part of it (at least acres) none of it
Are there any wetlands located off-site and close enough to be affected by this project? $\Box Y \Box N \boxtimes Unknown$ If yes, could they be potential bog turtle habitat? $\Box Y \Box N \boxtimes Unknown$
Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.): Forest, abandoned industrial, railroad tracks
WETLAND CHARACTERISTICS
Wetland type(s) present and % cover: PEM 90 PSS PFO 10 POW
Are there any signs of disturbance to hydrology (ditching, filling, ponds, roads, etc.)? If yes, describe
☐ Y ☑ N Are there any signs of disturbance to vegetation (mowing, pasturing, burning, etc.)? If yes, describe

Project Name	Cricket Valley		Wetland 3 (con't)
Hydrology Y Q N Y Q N Y Q N Y Q N Y Q N Y Q N Y Q N Soils Mapping	Springs or seeps visible or likely? Spring houses in or adjacent to wetland? Saturated soils present? If yes, year-round Water visible on surface? Check all that ap rivulets videep larger pools/p Evidence of flooding? If yes, describe indi	? □ Likely □ Unlik oply: □ small puddles onds (" deep) icators	ely Unknown
	ons confirm mapped type? TYES TNO	Z OHKHOWH	±
Mucky ⁴ ? □ YES SUNC	How much of it (PEM) is mucky ?	Mucky soils range in depth from:to"	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
Non-mucky ⁶ ? □ YES □ NO	□ <10% □10-29% □ 30-49%		
Soils - PSS a	nd PFO Portions of Wetland		y
Mucky⁴? □ YES ☑ NO	How much of it is mucky? <10%	Mucky soils range in depth from:to	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
Check (X) if pr □ sedges □ re □ sensitive fere □ alder □ dog Additional dom Herptiles Were any bog te	tation (characterize the wetland as a who esent (≥ 5% areal coverage), and also circle ashes skunk cabbage a cattail sweet a rice cutgrass a tearthumb aread can swood area maple willow poison shinant species:	if dominant (≥ 20% co t flag □ jewelweed ary grass X <i>Phragm</i> i	sphagnum moss
Additional Co	mments/Observations: (use additional she when by Phras, Skung or 15 ppo) very small wet	ets if necessary) Labbage, egg	uisetum
YES ONE YES ONE YES ONE YES ONE YES ONE The Savah Investigator	UNSURE The soils criterion for UNSURE The vegetation criterio UNSURE This wetland is potential the best of my knowledge, all of the information of	bog turtle habitat is m n ⁸ for bog turtle habita al bog turtle habitat.	is accurate and complete.

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form (revised 06/01/2006)

	roject/Property Name: Walth Valley
	roject type: Industrial Dev
A	pplicant/Landowner Name: Advanced Power NA
С	ounty: Dutchess Quad: Dover Plains Township/Municipality: Dover
	NDI# Potential conflict with USFWS species? UY UN
A	CTION AREA ² ~ 7
A	CTION AREA ² ≈ 13 / α C. Does the Phase 1 survey include <u>all</u> wetlands in the action area? $\boxtimes Y \square N^3$
V	VETLAND ID: PHOTOS TAKEN: Yes \(\text{No WETLAND SIZE:} \) Vetland size estimation - If actual acreage is not known at time of investigation, check one: \[\left(\text{acres} \text{12} \) \[\left(\text{acres} \text{12} \) \[\left(\text{13} \) \[\left(\text{13} \) \[\left(\text{13} \) \[\text{14} \] \[\text{15} \] \[\text{15} \] \[\text{16} \]
W	/etland size estimation - If actual acreage is not known at time of investigation, check one:
-	1 CO.1 Acte - 0.1 -0.5 acte - 0.5 to -1 acte - 1 2 actes - 12 actes - 15 acte
· W	WETLAND LOCATION: Lat 41°40′42″N Long 73°35′01″W approximate center of wetland) GPS Datum (check one): □ NAD 27 ⋈ NAD 83 □ WGS 84
,	SURVEY CONDITIONS & LIMITATIONS
D	ate of survey: 62409 Time In: 9100 AM Time Out: 11:15 AM ast precipitation: 24 tours 11-7 days 1>1 week 1 unknown Drought conditions? 1Y N Unknown
Li 2 hove a	va run for scarce Sprinkled troop, 100%, across and high hymin to told the Control
Н	ow much of this wetland is located off-site (i.e., outside the property boundaries or right-of-way)?
	none of it — the entire wetland is within the property boundaries (skip next 2 questions)
	A some of it - acres or % of the wetland appears to be located off-site other side of swamp wer (floodplain marsh and PFO)
Τf	part of this wetland continues off-site, how much of the off-site portion was surveyed (on foot)?
	In one of it all of it part of it _ % or acres of the off-site portion)
L	ow much of the off-site portion of this wetland is visible (e.g., from the subject property or from a public road)?
П	all of it part of it (at least, 5 acres) are none of it
Α	re there any wetlands located off-site and close enough to be affected by this project? $\Box Y \Box N \not\boxtimes Unknown$ If yes, could they be potential bog turtle habitat? $\Box Y \Box N \not\boxtimes Unknown$
D	escribe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):
Su	venup River, Old Industrial, Rt. 22 corridor, DFU, DFW Metro NGAN RR-track
~	Metongan RR track
	WETLAND CHARACTERISTICS
W	Vetland type(s) present and % cover: PEM D PSS PFO (D POW Swarry Pire)
100	AV CAN An allow are signs of disturbance to hydrology (ditching filling ponds roads etc.)? If we describe
	Castern of this edge the to presence of RP, a culvert connects IY IN Are there any signs of disturbance to vegetation (mowing, pasturing, burning, etc.)? If yes, describe
1	
	PFO - (ed maple, swamp as oak, hickory, gran ash paison Ny, jack-in-pulpit, sensitive for noyal for
	pto - learnapa, marrie as acceptance and and
	baselind, Jack-wholen known tau indirection
	EN - phray, RCG, J. effusus, bur ceed, skunk canbage
	soften much ten

Hydrology			
OY ON	Springs or seeps \(\text{visible} \) or \(\text{likely} ?\) Spring houses in or adjacent to wetland? Saturated soils present? If yes, year-round Water visible on surface? Check all that ap rivulets (" deep) \(\text{larger pools/p}\) Evidence of flooding? If yes, describe ind Unit (optional):		Tyes Manown Soldepressions (4" deep)
	ons confirm mapped type? TYES TNC) 🖾 Unknown	
Mucky ⁴ ?	How much of it (PEM) is mucky ? □ <10% □10-29% □ 30-49%	Mucky soils range in depth from:to"	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12
Non-mucky ⁶ ? □ YES □ NC	\Box <10% \Box 10-29% \Box 30-49%		
Soils - PSS as	nd PFO Portions of Wetland		
Mucky⁴? ☐ YES ☑ NO	How much of it is mucky?	Mucky soils range in depth from:	Most of the mucky part(s) o the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12
Wetland Vege Check (X) if pr	only in post ms of drain tation (characterize the wetland as a who esent (≥ 5% areal coverage), and also circle	le) if dominant (≥ 20% co	overage).
Sedges True sedges True sensitive ferro alder Modes Additional dom the service services. Were any bog to Other herptiles	tation (characterize the wetland as a who esent (≥ 5% areal coverage), and also circle ashes skunk cabbage cattail sweet cattail sweet tearthumb reed can swood red maple willow poison shinant species:	if dominant (≥ 20% control of the property of	sphagnum moss ites purple loosestrife
Sedges True sedges True sensitive ferro alder Modes Additional dom the service services. Were any bog to Other herptiles	tation (characterize the wetland as a who esent (≥ 5% areal coverage), and also circle ashes skunk cabbage cattail sweet carting rice cutgrass tearthumb reed can awood red maple willow poison shinant species: Walfern intercupted greating cattail sweet	if dominant (≥ 20% control of the property of	sphagnum moss ites purple loosestrife

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹ (revised 06/01/2006)

Project Name	Cricket Valley		Wetland (con't)
図 入 ロ	Springs or seeps \(\sigma\) visible or \(\sigma\) likely? Spring houses in or adjacent to wetland? Saturated soils present? If yes, year-round Water visible on surface? Check all that ap rivulets (" deep) \(\sigma\) larger pools/p Evidence of flooding? If yes, describe ind	P □ Likely □ Unlikepply: ❷ small puddles	kely Unknown 1"-30" s/depressions (_"deep)
Soils Mapping V	Unit (optional):) 🖾 Unknown	
Soils - PEM P	ortion of Wetland		
Mucky⁴? ☐ YES ☐ NO	How much of it (PEM) is mucky? □ <10% □ 10-29% □ 30-49% □ 50-70% □ >70%	Mucky soils range in depth from:	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
Non-mucky ⁶ ? XYES □ NO	How much of it (PEM) is non-mucky? □ <10% □10-29% □30-49% □ 50-70% □>70%		
Soils - PSS and	d PFO Portions of Wetland	**************************************	
Mucky⁴? □ YES X NO	How much of it is mucky? □ <10% □ 10-29% □ 30-49%	Mucky soils range in depth from: to"	Most of the mucky part(s) of the wetland can be probed ⁵ : □ 3-5" □ 6-8" □ 9-11" □ ≥12"
sedges rus	sent (≥ 5% areal coverage), and also circle shes Skunk cabbage Scattail Sweet	t flag Djewelweed	sphagnum moss
<u>Herptiles</u> Were any bog tu Other herptiles	urtles observed? UYES? NO If y Observed Upreviously observed:	es, how many?	D, green frog
Additional Con	nments/Observations: (use additional she w sour hognosed snall, so the alang kirtuits	ets if necessary)	e, parted turn on
YES DINO YES DINO YES DINO YES DINO YES DINO	UNSURE The soils criterion for UNSURE The vegetation criterio	bog turtle habitat is m n ⁸ for bog turtle habita al bog turtle habitat.	net. at is met.
Sarah	Shute Swal International Short (315) (36)	Lend vestigator's Signature 5 - 7228	6/24/09