

Bellefonte Nuclear Plant, Units 3 & 4  
COL Application  
Part 3, Environmental Report

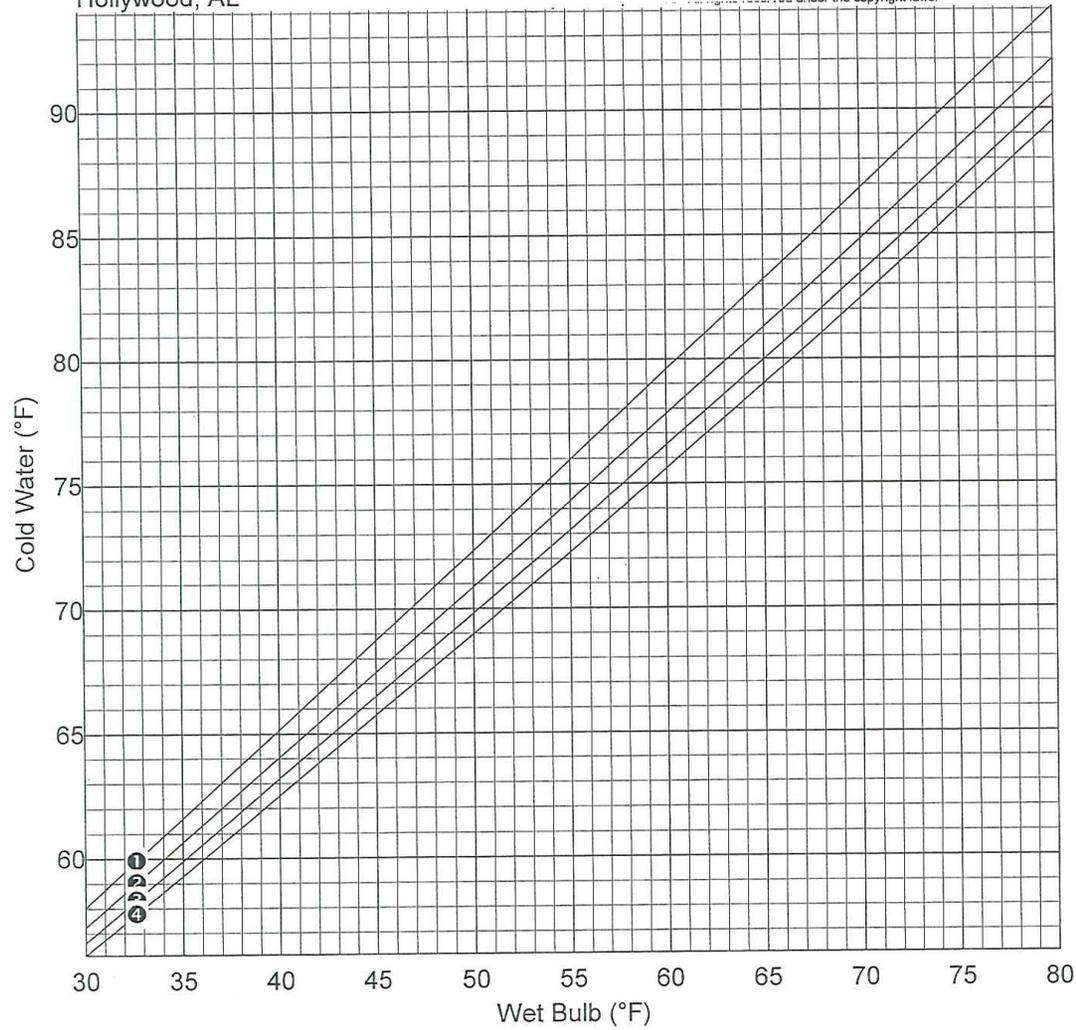
Performance Curve for  
TVA - Bellefonte Nuclear Plant  
Hollywood, AL

SPX Cooling Tower Co.  
TRACS Version 04-AUG-06

Natural Draft Counterflow  
Cooling Tower  
Model Hamon ND

Curve Conditions: **CI**  
Range 24.13°F  
Flow Rate 450000GPM  
( 90% Design Flow )

DF254

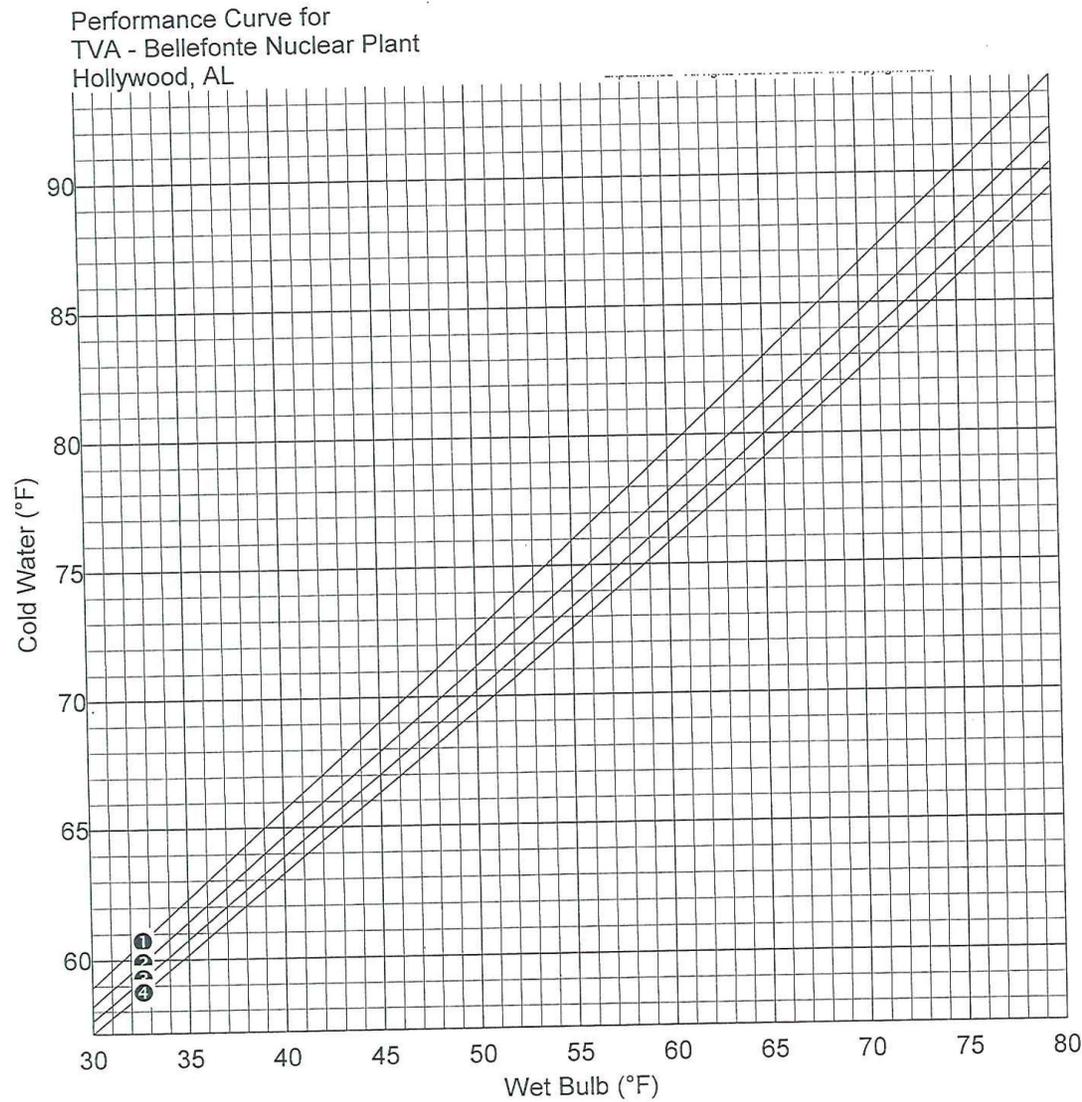


- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

Time: 09:07:37 Date: 01-17-2007 Drawn By: PRS

**FIGURE 3.4-4 (Sheet 1 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

Bellefonte Nuclear Plant, Units 3 & 4  
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SPX Cooling Tower Co.  
 TRACS Version 04-AUG-06

Natural Draft Counterflow  
 Cooling Tower  
 Model Hamon ND

Design Conditions: **C2**  
 Flow Rate 500000GPM  
 Hot Water 121.06°F  
 Cold Water 90.90°F  
 Wet-Bulb 77.00°F  
 Rel.Humidity 62%

Curve Conditions:  
 Range 30.16°F  
 Flow Rate 450000GPM  
 ( 90% Design Flow )

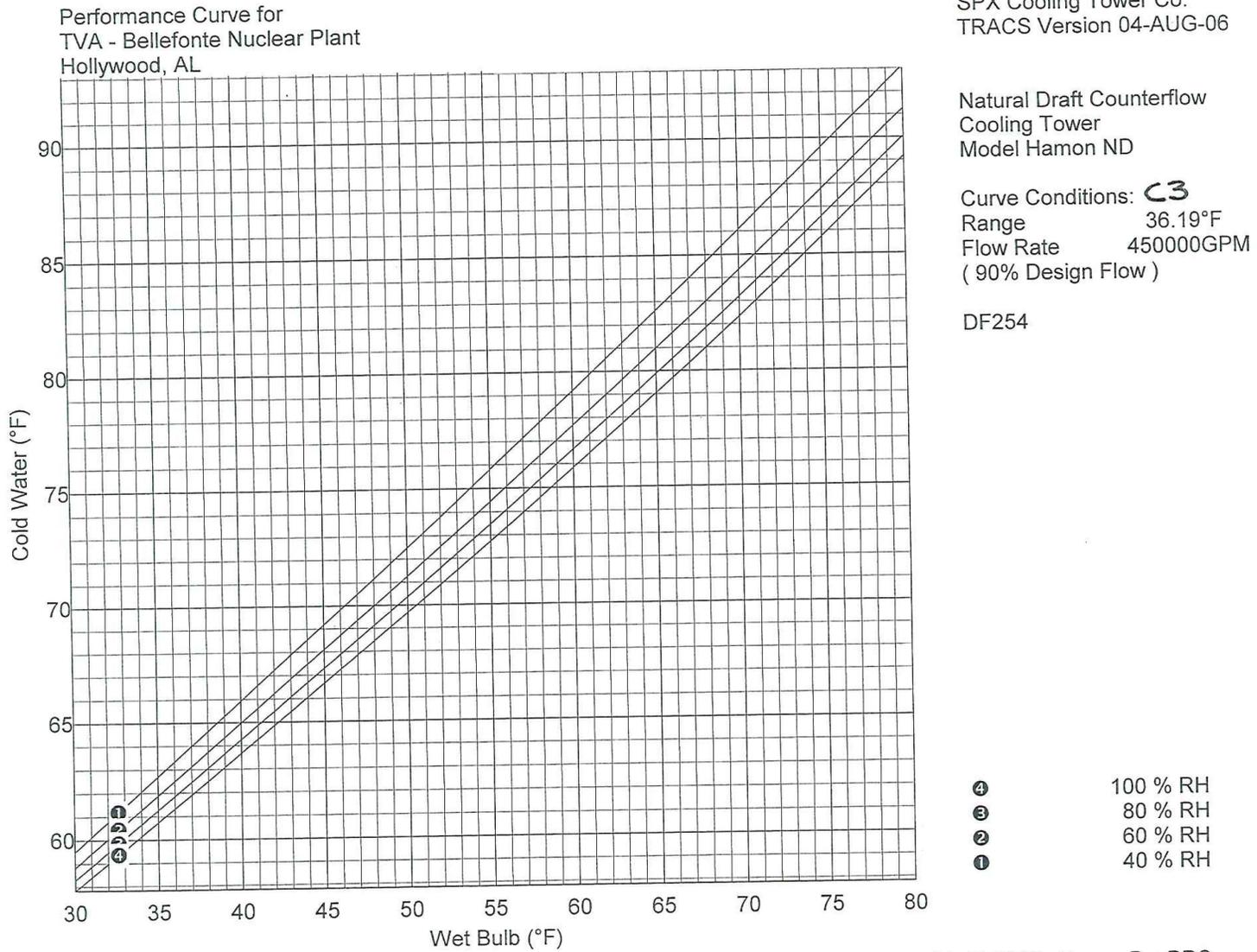
DF254

- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

Time: 09:03:30 Date: 01-17-2007 Drawn By: PRS

**FIGURE 3.4-4 (Sheet 2 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

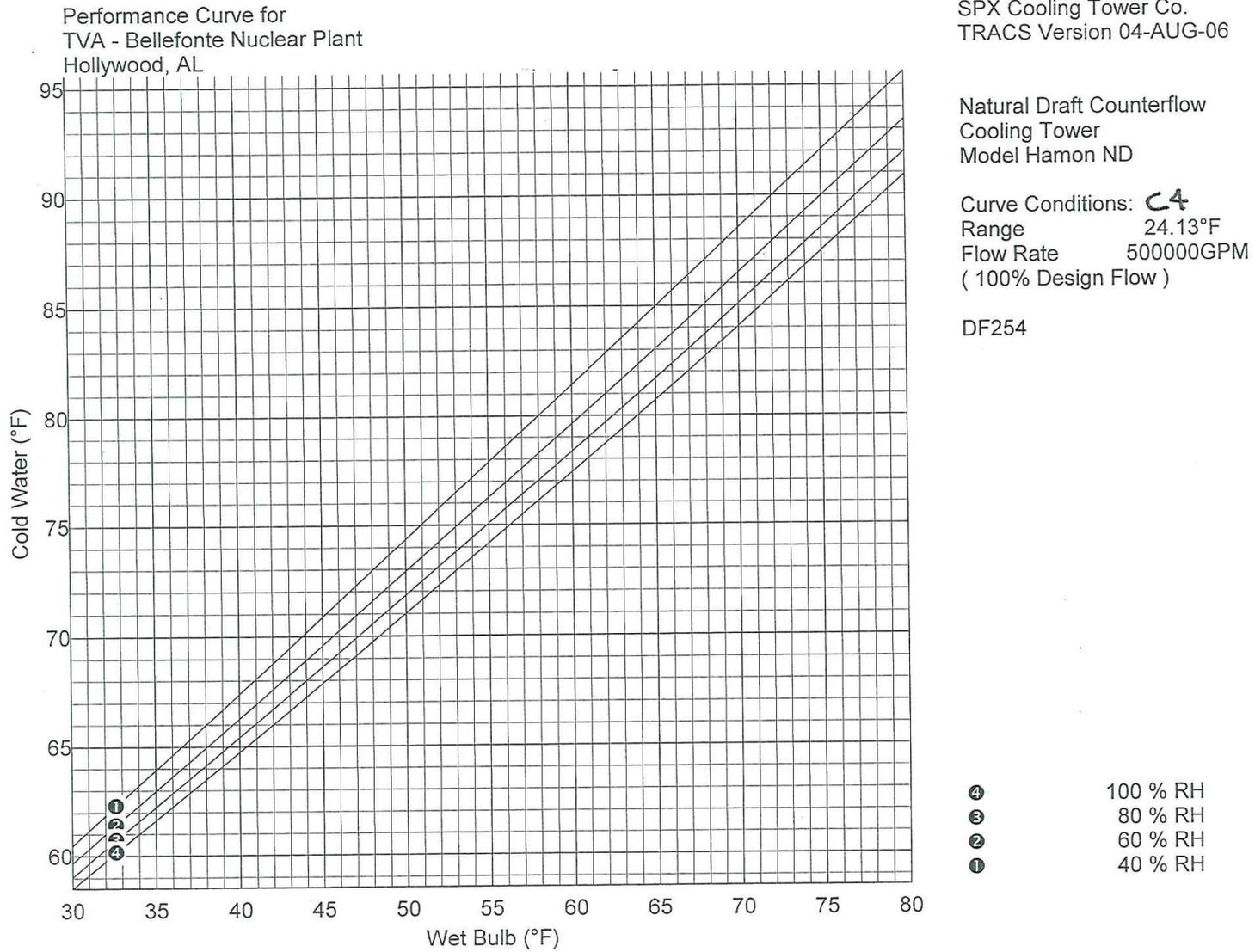
Bellefonte Nuclear Plant, Units 3 & 4  
COL Application  
Part 3, Environmental Report



Time: 09:14:16 Date: 01-17-2007 Drawn By: PRS

**FIGURE 3.4-4 (Sheet 3 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

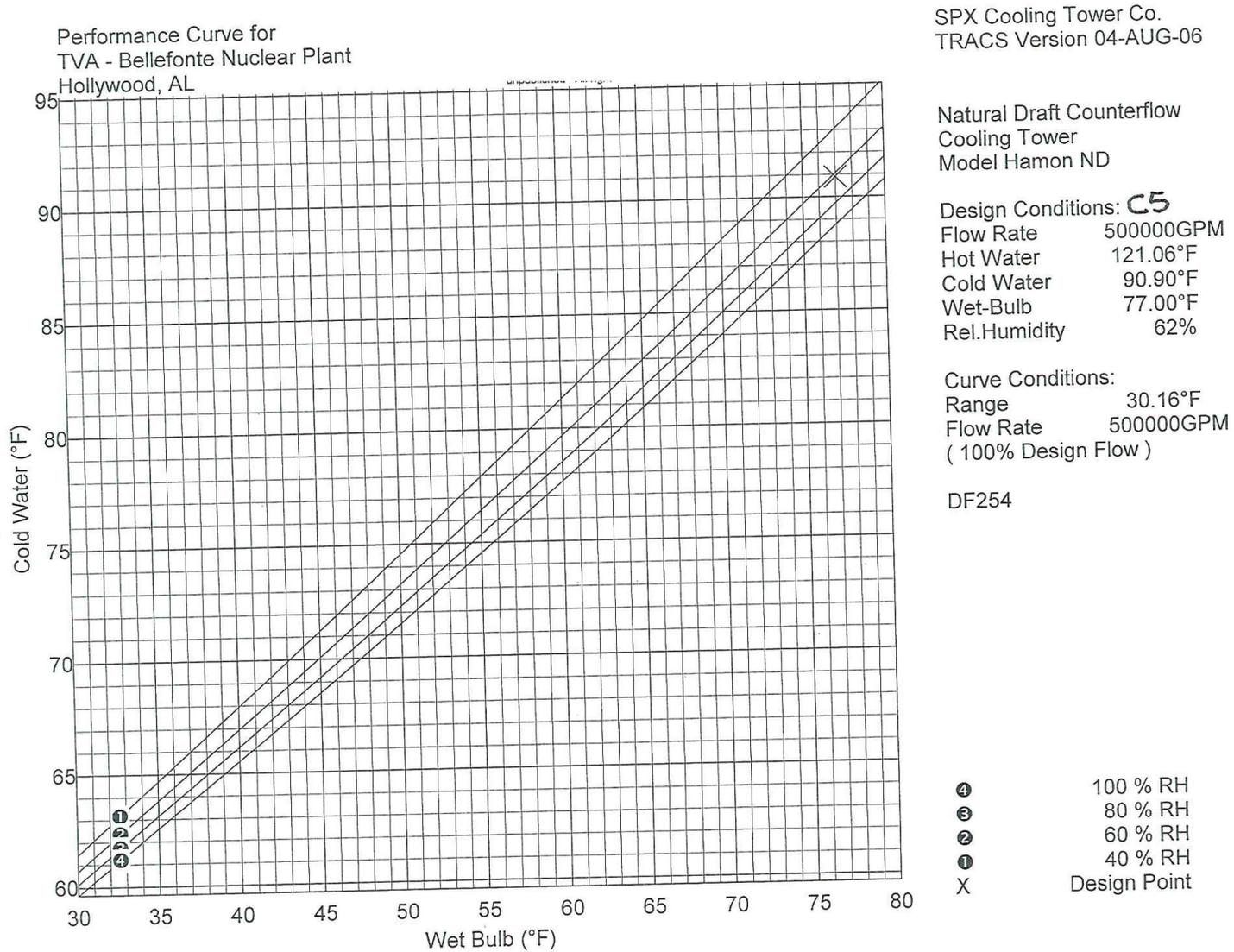
Bellefonte Nuclear Plant, Units 3 & 4  
 COL Application  
 Part 3, Environmental Report



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**FIGURE 3.4-4 (Sheet 4 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

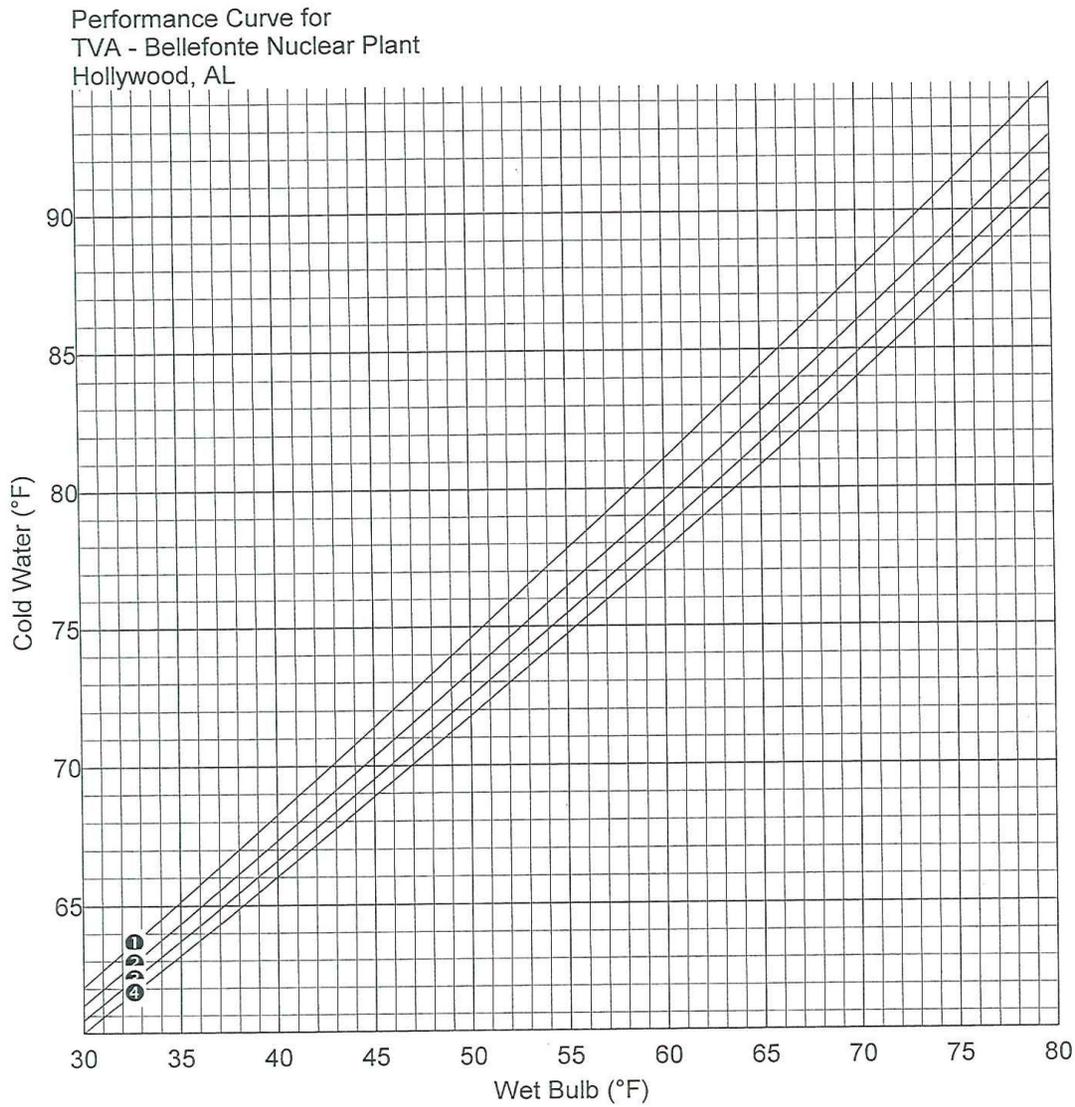
Bellefonte Nuclear Plant, Units 3 & 4  
 COL Application  
 Part 3, Environmental Report



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**FIGURE 3.4-4 (Sheet 5 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

Bellefonte Nuclear Plant, Units 3 & 4  
 COL Application  
 Part 3, Environmental Report



SPX Cooling Tower Co.  
 TRACS Version 04-AUG-06

Natural Draft Counterflow  
 Cooling Tower  
 Model Hamon ND

Curve Conditions: **C6**  
 Range 36.19°F  
 Flow Rate 500000GPM  
 ( 100% Design Flow )

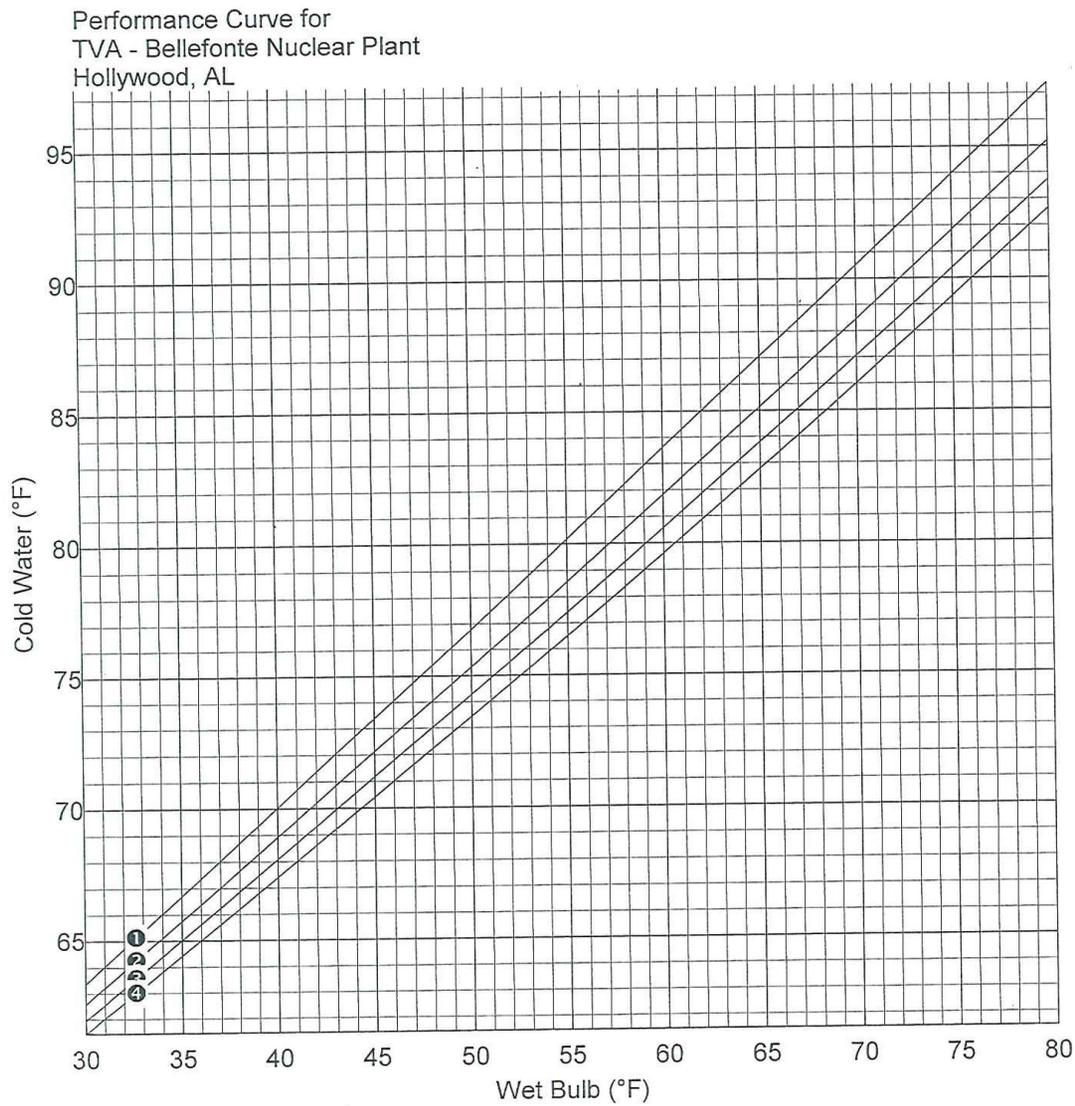
DF254

- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

Time: 09:14:24 Date: 01-17-2007 Drawn By: PRS

**FIGURE 3.4-4 (Sheet 6 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

Bellefonte Nuclear Plant, Units 3 & 4  
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SPX Cooling Tower Co.  
TRACS Version 04-AUG-06

Natural Draft Counterflow  
Cooling Tower  
Model Hamon ND

Curve Conditions: **C7**  
Range 24.13°F  
Flow Rate 550000GPM  
( 110% Design Flow )

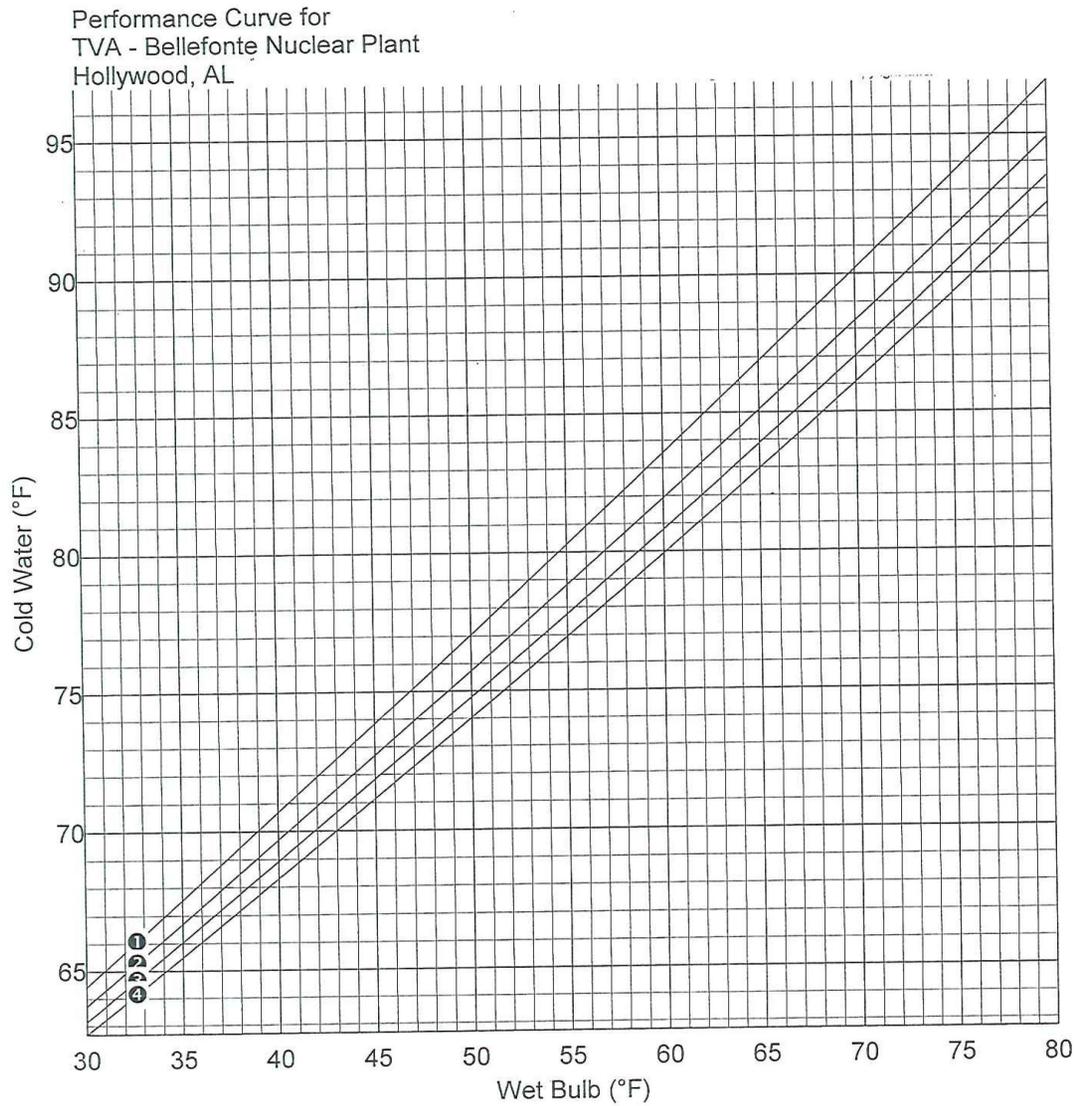
DF254

- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

Time: 09:07:51 Date: 01-17-2007 Drawn By: PRS

**FIGURE 3.4-4 (Sheet 7 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

Bellefonte Nuclear Plant, Units 3 & 4  
 COL Application  
 Part 3, Environmental Report



SPX Cooling Tower Co.  
 TRACS Version 04-AUG-06

Natural Draft Counterflow  
 Cooling Tower  
 Model Hamon ND

Design Conditions: **C8**  
 Flow Rate 500000GPM  
 Hot Water 121.06°F  
 Cold Water 90.90°F  
 Wet-Bulb 77.00°F  
 Rel.Humidity 62%

Curve Conditions:  
 Range 30.16°F  
 Flow Rate 550000GPM  
 ( 110% Design Flow )

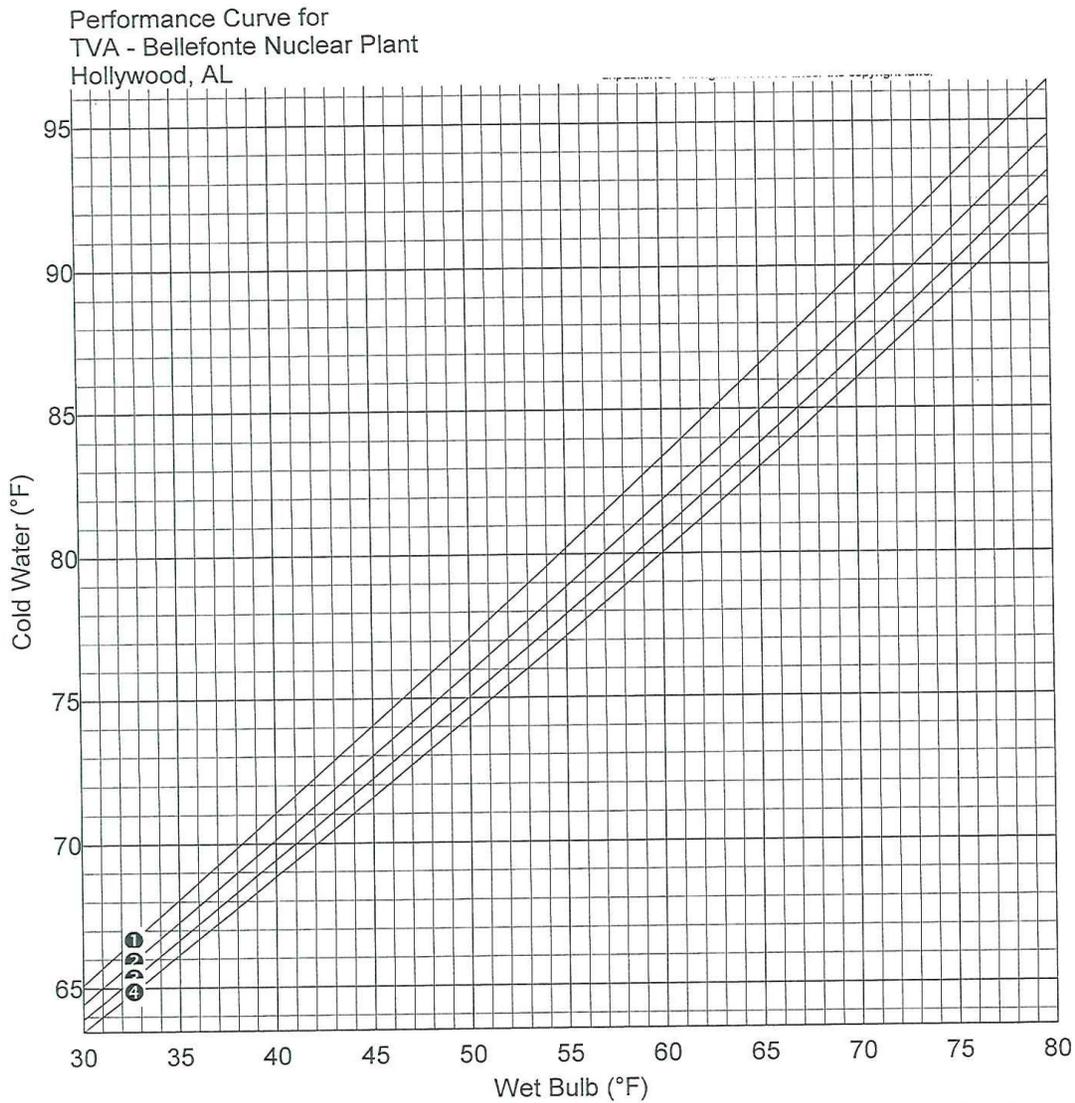
DF254

- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

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**FIGURE 3.4-4 (Sheet 8 of 9)**  
**Natural Draft Cooling Tower Performance Curves**

Bellefonte Nuclear Plant, Units 3 & 4  
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SPX Cooling Tower Co.  
 TRACS Version 04-AUG-06

Natural Draft Counterflow  
 Cooling Tower  
 Model Hamon ND

Curve Conditions: **C9**  
 Range 36.19°F  
 Flow Rate 550000GPM  
 ( 110% Design Flow )

DF254

- ④ 100 % RH
- ③ 80 % RH
- ② 60 % RH
- ① 40 % RH

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**FIGURE 3.4-4 (Sheet 9 of 9)**  
**Natural Draft Cooling Tower Performance Curves**