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CPSES-200401138  
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RP-52

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U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

**SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)**  
**DOCKET NOS. 50-445 AND 50-446**  
**ENVIRONMENTAL PROTECTION PLAN**  
**ANNUAL ENVIRONMENTAL OPERATING REPORT FOR 2003**

Gentlemen:

Pursuant to Section 5.4.1 of the Environmental Protection Plan (Appendix B to CPSES Unit 1 and Unit 2 Facility Operating License Nos. NPF-87 and NPF-89, respectively), attached is the CPSES Annual Environmental Operating Report for year 2003.

If you have any questions, please contact Mr. Bruce Turner at (254) 897-8901.

A member of the **STARS** (Strategic Teaming and Resource Sharing) Alliance

Callaway • Comanche Peak • Diablo Canyon • Palo Verde • South Texas Project • Wolf Creek

IE25

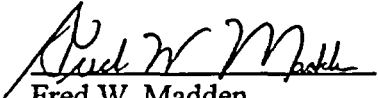
TXX-04078  
Page 2 of 2

This communication contains no new licensing basis commitments regarding CPSES Units 1 and 2.

Sincerely,

TXU Generation Company LP  
By: TXU Generation Management Company LLC,  
Its General Partner

Mike Blevins

By:   
Fred W. Madden  
Regulatory Affairs Manager

CLW/clw  
Attachment

c - B. S. Mallett, Region IV w/attch.  
W. D. Johnson, Region IV (clo)  
M. C. Thadani, NRR (clo)  
Resident Inspectors, CPSES w/attch.

**TXU ENERGY**  
**COMANCHE PEAK STEAM ELECTRIC STATION**  
**UNITS 1 & 2**  
**2003**  
**ANNUAL ENVIRONMENTAL OPERATING REPORT**  
**(NON-RADIOLOGICAL)**  
**FACILITY OPERATING LICENSE NOS. NPF-87 & 89**

## **I. INTRODUCTION**

This report describes implementation of the Environmental Protection Plan (EPP) for the calendar year 2003 as required by Appendix B to Facility Operating License Nos. NPF-87 & 89 for Comanche Peak Steam Electric Station (CPSES) Units 1 & 2.

During 2003, the CPSES Nonradiological Environmental Monitoring Program was effective in implementing and monitoring all CPSES environmental regulatory commitments. Program effectiveness in 2003 was substantiated by TXU Corporate environmental audits, compliance evaluations conducted by the CPSES Nuclear Overview Department, and department self-assessments.

## **II. SCOPE**

Section 5.4.1 of the EPP requires that CPSES submit to the NRC an Annual Environmental Operating Report that shall address the following environmental protection activities:

- A. Summaries and analyses of the results of the environmental protection activities required by Section 4.2 of the EPP, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, a detailed analysis of the data and a proposed course of mitigating action is required. Section 4.2 of the EPP pertains to results from:
  - 1. Groundwater levels and station water use monitoring.
  - 2. Water treatment facility outages impact assessment and reporting.
- B. The report shall also include:
  - 1. A list of EPP noncompliances and the associated corrective actions.
  - 2. A list of all changes in station design and operation, tests, and experiments made in accordance with Subsection 3.1 of the EPP which involved a potentially significant unreviewed environmental question.
  - 3. A list of nonroutine reports submitted in accordance with Subsection 5.4.2 of the EPP.
  - 4. A summary list of Texas Pollutant Discharge Elimination System (TPDES) permit related reports relative to matters identified in Subsection 2.1 of the EPP which were submitted to the Texas Commission on Environmental Quality (TCEQ) during the report period. Subsection 2.1 of the EPP pertains to aquatic matters that are addressed by the effluent limitations, and the monitoring requirements contained in the TCEQ TPDES station wastewater discharge permit.

### III. RESULTS OF ACTIVITIES

- A. As required by Subsection 4.2 of the EPP, the following are summaries and analyses of the environmental protection activities during 2003. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2003.

#### 1. Groundwater Pumpage

As indicated in Table 1, groundwater pumpage during 2003 averaged 18.0 gals./min. (gpm) or 9,441,000 total gallons withdrawn for the year. This withdrawal rate represents a 18% decrease from the 2002 average rate of 22.0 gpm. Groundwater withdrawal was highest in October at 23.6 gpm and lowest in November with an average withdrawal rate of 11.7 gpm.

Groundwater withdrawn during 2003 was used primarily for potable and sanitary purposes with only a very small amount used as make-up to the plant fire protection system. No groundwater was used to supplement the station's Surface Water Treatment System.

The average annual pumpage rate of 18.0 gpm for 2003 represents 14.2% of the predicted operational pumpage (127 gpm) identified in Section 3.3 of the Station's Environmental Report - Operational License Stage. This rate also represents approximately 11% of the actual average withdrawal rate (158 gpm) reported in the Station's Final Environmental Statement - Operating License Stage (Section 5.3.1.2) for the period 1975 to May 1979.

The combined annual rate for all recorded preoperational groundwater pumpage averaged 68.8 gpm, while the average operational pumpage for the period 1990 through 2003 was 28.2 gpm. Therefore, the average operational rates are 59% less than the groundwater pumpage during the preoperational period. Figure 1 illustrates the annual fluctuation of groundwater withdrawal over the entire preoperational and operational period.

#### 2. Groundwater Levels

As indicated in Table 2, the groundwater level in the on-site observation well OB-3 (intersection of Highway 56 and the Plant Access Road) fluctuated during 2003 from a high level in April of 528.1 ft. Mean Sea Level (MSL) to a low level in September of 522.9 ft. MSL. Overall, the water level in OB-3 during the reporting period (January through December) decreased 1.9 ft. (0.6m).

The 2003 annual average groundwater levels in well OB-3 and OB-4 were 525.8 ft. MSL and 558.6 ft. MSL, respectively. These average levels demonstrated an increase of 0.1 ft. (0.03m) for OB-3 and a decrease of 1.1 ft. (0.3m) for OB-4 from the respective average 2002 levels (Figure 2).

3. Surface Water Treatment System Operation

The station's Water Treatment System processed 166,876,900 total gallons (317.5 gpm) of surface water during 2003 for plant process use. There were no outages during 2003 that required reporting in accordance with Section 4.2.2 of the EPP.

The following is a summary list of monthly surface water usage:

MONTH	SURFACE WATER PROCESSED (GALS.)
JANUARY	3,480,800
FEBRUARY	13,302,200
MARCH	14,319,100
APRIL	14,751,500
MAY	11,593,700
JUNE	13,896,200
JULY	10,728,400
AUGUST	11,043,100
SEPTEMBER	23,223,900
OCTOBER	11,051,900
NOVEMBER	17,547,000
DECEMBER	21,939,100
TOTAL	166,876,900

B. EPP Noncompliance and Corrective Actions - Subsection 5.4.1(1)

There were no noncompliances with the requirements of the EPP during the reporting period.

C. Changes In Station Design or Operation, Tests, and Experiments Made In Accordance With Subsection 3.1 Which Involved A Potentially Significant Unreviewed Environmental Question.

There were no changes in station design, operation, tests or experiments conducted during the reporting period that are reportable under this subsection.

D. Nonroutine Reports Submitted In Accordance With Subsection 5.4.2

Other than those nonroutine reports identified in section III.E, there were no other nonroutine reports submitted under this subsection.

E. Texas Pollutant Discharge Elimination System (TPDES) Permit-Related Reports Relative To Matters Identified In Subsections 2.1 and 5.4.1

1. Routine monthly Discharge Monitoring Reports (DMR) for all wastewater outfalls were submitted to the Texas Commission on Environmental Quality (TCEQ) for each month during 2003. The following is a summary list of correspondence pertaining to DMRs and TPDES permit related documents.

MONTH MONITORED	LOG NUMBER/DATE
JANUARY	TXX-03039 - 02/20/03 TXX-03209 - 01/09/03 / "Bio-Monitoring Submission"
FEBRUARY	TXX-03060 - 03/20/03 TXX-03054 - 02/28/03 / "Unauthorized Discharge Notification"
MARCH	TXX-03074 - 04/21/03 TXX - N/A - 03/26/03 / "Amend to TXX-03209 Dated 01/09/03"
APRIL	TXX-03091 - 05/21/03
MAY	TXX-03106 - 06/21/03
JUNE	TXX-03118 - 07/18/03
JULY	TXX-03140 - 08/20/03 TXX-03123 - 07/18/03 / "Bio-Monitoring Submission"
AUGUST	TXX-03164 - 09/19/03
SEPTEMBER	TXX-03177 - 10/20/03
OCTOBER	TXX-03193 - 11/21/03
NOVEMBER	TXX-03203 - 12/22/03
DECEMBER	TXX-04013 - 1/23/03

2. There was one (1) TPDES wastewater discharge permit noncompliance in 2003. This noncompliance pertained to the release of fire protection water to Squaw Creek Reservoir. A written report of the release was submitted to the TCEQ on February 28, 2003, (TXX-03054) with a copy to the NRC. There was no observed environmental impact to Squaw Creek Reservoir as a result of the release of approximately 8,000 to 9,000 gallons of fire protection water to this water body.

**TABLE 1**  
**SUMMARY OF GROUNDWATER PUMPAGE**  
**For 2003**

MONTH	PLANT WELL 1		PLANT WELL 2		NOSF WELL 1		NOSF WELL 2		REC/TRAINING		TOTALS		NO. OF DAYS BETWEEN READINGS
	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	
January	157,700	3.5	460,600	10.3	36,600	0.8	39,400	0.9	1,100	0.0	695,400	15.6	31
February	336,200	8.3	434,500	10.8	37,600	0.9	38,800	1.0	600	0.0	847,700	21.0	28
March	749,000	16.8	0	0.0	44,900	1.0	43,300	1.0	1,200	0.3	838,400	18.8	31
April	724,600	16.8	18,900	0.4	55,500	1.3	56,600	1.3	500	0.1	856,100	19.8	30
May	269,400	6.0	400,900	9.0	35,100	0.8	64,400	1.4	2,400	0.1	772,200	17.3	31
June	156,300	3.6	444,300	10.3	85,300	2.0	102,400	2.4	2,800	0.1	791,100	18.3	30
July	652,500	14.6	0	0.0	54,500	1.2	54,300	1.2	12,800	<0.1	774,100	17.3	31
August	173,000	3.9	491,700	11.0	51,500	1.2	48,600	1.1	1,200	0.1	766,000	17.2	31
September	0	0.0	877,700	20.3	56,000	1.3	58,500	1.4	1,100	<0.1	993,300	23.0	30
October	897,100	20.1	78,500	1.8	35,400	0.8	39,500	0.9	1,700	<0.1	1,052,200	23.6	31
November	0	0.0	449,600	10.4	28,600	0.7	28,000	0.6	1,200	<0.1	507,400	11.7	30
December	0	0.0	491,200	11.0	27,600	0.6	27,700	0.6	600	<0.1	547,100	12.3	31
<b>TOTAL</b>	<b>4,115,800</b>	<b>7.8</b>	<b>4,147,900</b>	<b>7.9</b>	<b>548,600</b>	<b>1.0</b>	<b>601,500</b>	<b>1.1</b>	<b>27,200</b>	<b>0.1</b>	<b>9,441,000</b>	<b>18.0</b>	<b>365</b>



**TABLE 2**

**2003 SUMMARY OF GROUNDWATER  
LEVELS IN OBSERVATION WELLS**

MONTH	WELL OB-3 (G-3)		WELL OB-4 (G-4)	
	DEPTH (1)	MSL (2)	DEPTH (1)	MSL (2)
January	267.47	526.36	285.83	562.05
February	266.77	527.06	283.85	564.03
March	266.28	527.55	283.65	564.23
April	265.69	528.14	282.37	565.51
May	265.71	528.12	284.21	563.67
June	266.59	527.24	286.96	560.92
July	267.65	526.18	287.39	560.49
August	270.56	523.27	295.75	552.13
September	270.84	522.99	297.55	550.33
October	269.88	523.95	297.44	550.44
November	269.47	524.36	294.13	553.75
December	269.37	524.46	292.62	555.26

**ANNUAL GROUNDWATER LEVEL CHANGE FOR 2003:**

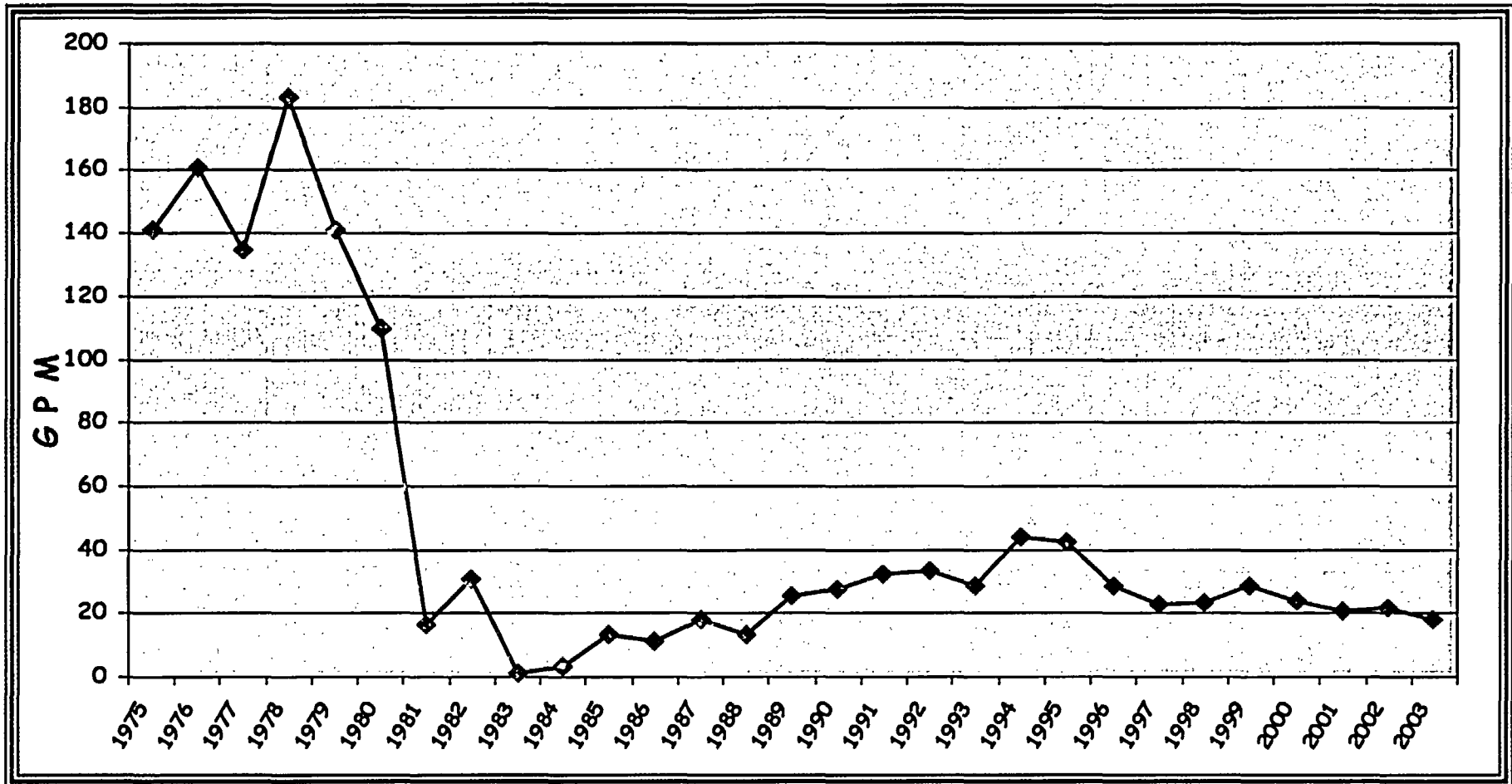
Well OB-3: 267.5 ft. - 269.4 ft = (-) 1.9 ft. = (-)0.6m (decrease)  
Well OB-4: 285.8 ft. - 292.6 ft = (-) 6.8 ft. = (-)0.7m (decrease)

**NOTES:**

- (1) Depth to water table (ft.)
- (2) Water table elevation (ft.) Mean Sea Level (MSL)

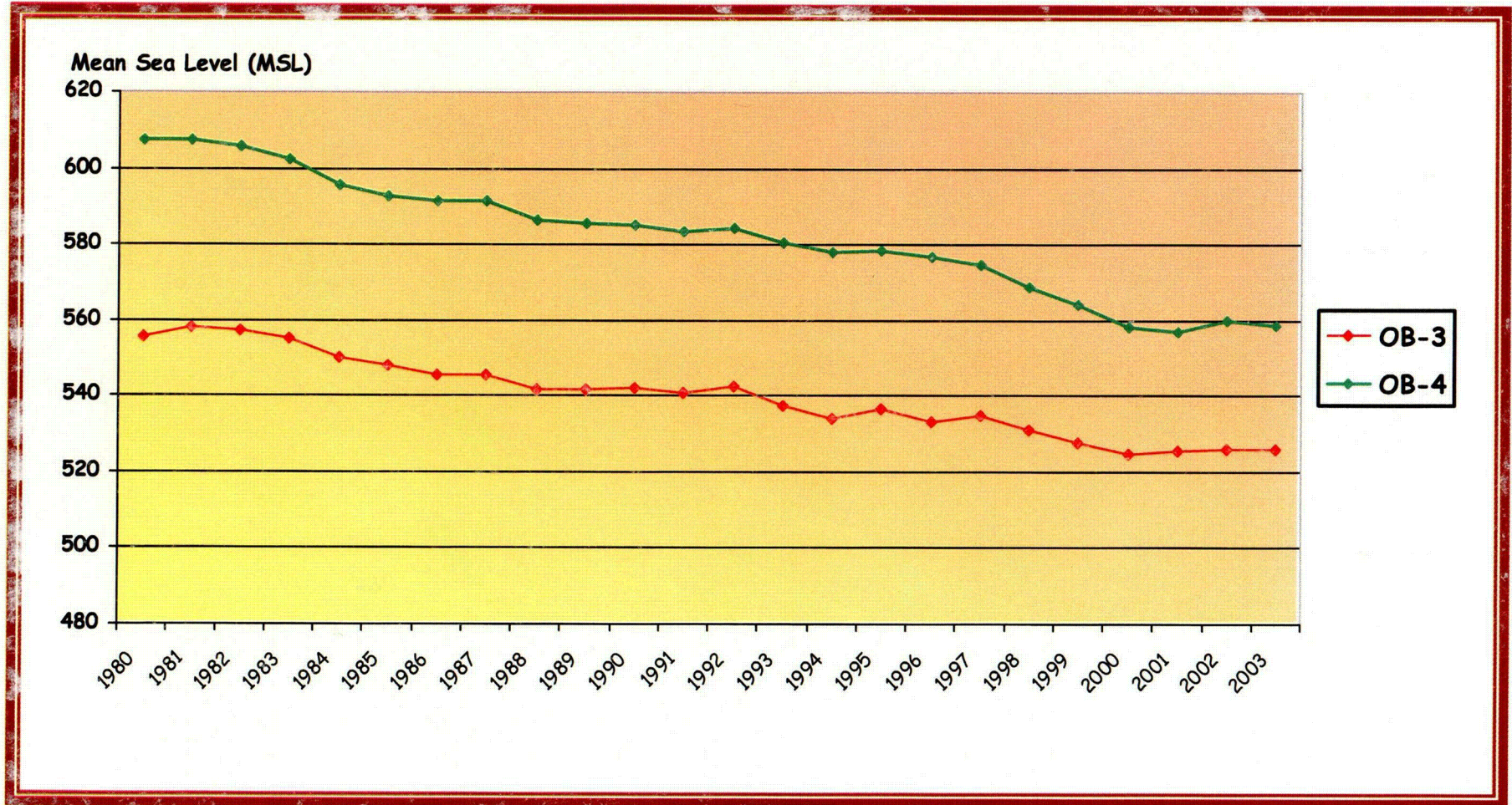
**FIGURE 1**  
**SUMMARY OF GROUNDWATER PUMPAGE**  
**1975 THROUGH 2003 (GPM)**

**Annual Groundwater Pumpage**



1. 2/8/90 - Unit #1 Operational. Discontinued using treated surface water for potable use.
2. 2/2/93 - Unit #2 Operational

**FIGURE 2**  
**ANNUAL AVERAGE GROUNDWATER LEVEL**  
**1980 through 2003**



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