

From: jerome@lanl.gov [mailto:jerome@lanl.gov]
Sent: Tuesday, October 31, 2006 5:35 PM
To: Folk, Kevin T.
Cc: Susan D. Radzinski
Subject: Fwd: RE: Re: Fwd: RE: Re: FW: Remaining Data Needs to Update LANL SWE IS Infrastructure

Kevin,

You are asking specific questions then combining the question with another question. For Question 2 the Mw capacity of the TA-3 Power Plant will not increase due to the completion of the refurbished unit due to the reasons stated below. The Mw capacity will increase due to the installation of the combustion turbine by 20 to 25 Mw depending on ambient conditions. The combustion turbine is located within the Power Plant complex, stands alone, but is separate from the boiler and steam systems. It is not dependent on systems that support the steam turbines except for natural gas of which there is sufficient capacity.

2. Related question is what will be the MW capacity of TA-3 after completion of the reinstall of the refurbished unit? Wasn't the whole idea of the project intended to improve reliability and to increase onsite electric power generating capacity?

X-Sieve: CMU Sieve 2.2
X-Mailer: QUALCOMM Windows Eudora Version 7.0.1.0
Date: Tue, 31 Oct 2006 13:46:18 -0700
To: "Jerome F. Gonzales" <jerome@lanl.gov>
From: "Susan D. Radzinski" <sradz@lanl.gov>
Subject: Fwd: RE: Re: Fwd: RE: Re: FW: Remaining Data Needs to Update
LANL SWE IS Infrastructure
X-PMX-Version: 4.7.1.128075

Jerry,

Will you please respond directly to Kevin and copy me? Many thx.

Susan

X-Sieve: CMU Sieve 2.2
From: "Folk, Kevin T." <KEVIN.T.FOLK@saic.com>
To: sradz@lanl.gov
Subject: RE: Re: Fwd: RE: Re: FW: Remaining Data Needs to Update LANL SWE
IS Infrastructure
Date: Tue, 31 Oct 2006 15:08:36 -0500
X-Mailer: Internet Mail Service (5.5.2657.72)
x-originalarrivaltime: 31 Oct 2006 20:08:37.0789 (UTC) FILETIME=[5A0BF4D0:01C6FD28]
Sender: KEVIN.T.FOLK@saic.com
X-Proofpoint-Virus-Version: vendor=fsecure engine=4.65.5446:2.3.11,1.2.37,4.0.164
definitions=2006-10-31_05:2006-10-28,2006-10-30,2006-10-31 signatures=0
X-Proofpoint-Spam: 0
X-PMX-Version: 4.7.1.128075

Susan:

Again, sorry to beat a dead horse on this. Based on Jerry's responses below, the remaining key question is #1-understanding that the total capacity of the TA-3 plant will not change with the refurbishment of unit 3, what will the nominal capacity of the total plant be given the upgrades?

#2-will the addition of the new unit in 2007 add another 20 MW of capacity to the preceding or will it also be limited by cooling restrictions etc? The original goal of the TA-3 project as stated from year to year in each yearbook was to add 40 MW of capacity to TA-3, so I am just trying to validate how much these modifications will achieve.

Thanks for you patience.

Kevin

-----Original Message-----

From: sradz@lanl.gov [mailto:sradz@lanl.gov]

Sent: Monday, October 30, 2006 10:47 AM

To: Folk, Kevin T.

Cc: Jerome F. Gonzales

Subject: Fwd: Re: Fwd: RE: Re: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

Kevin,

This response is from Jerry Gonzales, LANL Utilities.

Susan

X-Sieve: CMU Sieve 2.2

X-Mailer: QUALCOMM Windows Eudora Version 7.0.1.0

Date: Mon, 30 Oct 2006 08:40:07 -0700

To: "Susan D. Radzinski" <sradz@lanl.gov>

From: "Jerome F. Gonzales" <jerome@lanl.gov>

Subject: Re: Fwd: RE: Re: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

X-PMX-Version: 4.7.1.128075

Susan,

On question 2 the total capacity of the TA-03 Power Plant will not increase with the refurbishment of Turbine 3. Even though the turbine and generator will have more capacity the auxiliary systems (cooling towers, feedwater heaters, boilers, etc.) will not have additional capacity.

At 12:21 PM 10/27/2006, you wrote:

Jerry,

Will you please also address question # 2 below? Thx.

At 10:58 AM 10/27/2006, you wrote:

Susan,

We're behind schedule on the steam turbine also. The turbine refurbishment contractor is on site at this moment and expected completion date of the refurbishment is the end of FY07.

At 09:19 AM 10/27/2006, you wrote:

Jerry,

Once again, I am turning to you - please see below. Thank you for your help.

Susan

X-Sieve: CMU Sieve 2.2

Subject: RE: Re: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

Date: Fri, 27 Oct 2006 11:11:40 -0400

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

Thread-Topic: Re: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

Thread-Index: Acb5QzpyIMHundcMRZWXCXkleOJbyoAAjSsnA

From: "Folk, Kevin T." <KEVIN.T.FOLK@saic.com>

To: <sradz@lanl.gov>

Cc: "Owens, Kirk W." <KIRK.W.OWENS@saic.com>

X-OriginalArrivalTime: 27 Oct 2006 15:11:42.0147 (UTC)

FILETIME=[3571B930:01C6F9DA]

Sender: KEVIN.T.FOLK@saic.com

X-Proofpoint-Virus-Version: vendor=fsecure

engine=4.65.5446:2.3.11,1.2.37,4.0.164

definitions=2006-10-27_06:2006-10-26,2006-10-27,2006-10-27 signatures=0

X-Proofpoint-Spam: 0

X-PMX-Version: 4.7.1.128075

Susan:

I had a follow-up question on the 20 MW generator at TA-3 but wanted to first inquire about the status of the rewind and reinstallation of unit #3 as follows:

Section 3.4.2 of the 2005 SWEIS Yearbook states that "The #3 steam turbine... is currently a 10-megawatt unit. Rewinding of this unit began in CY 2003; it is expected that after this is

completed, the turbine's new output will be approximately 17 megawatts. Rewinding should be finished and the unit re-installed about September 2006.... the steam path and cooling tower for the unit need to be improved; this upgrade is scheduled to be completed in FY 2006. Due to cooling water restrictions, the total capacity of the plant will not increase."

Note that in the Draft SWEIS, we said that the rewound unit was to be installed in the May 2006 timeframe and that the steam path modifications were already completed.

1. First question of course is did the reinstall occur and, if not, what is the current estimate?
2. Related question is what will be the MW capacity of TA-3 after completion of the reinstall of the refurbished unit? Wasn't the whole idea of the project intended to improve reliability and to increase onsite electric power generating capacity?
3. Regarding the new 20 MW unit, we say in the Draft SWEIS that it was to be operational in June 2006 and that necessary construction was nearly complete. Is Gilbert referring to the first new unit as now not being operational until the end of FY07 or is he referencing the 2nd unit that was proposed under the combustion turbine EA?

Sorry to be a pain. I just want to be sure we are comparing apples to apples and that we are as up to date as possible in the Final SWEIS and have captured things accurately.

Kevin

Kevin T. Folk, Senior Analyst
Engineering & Infrastructure
Compliance and Nuclear Engineering Division
Science Applications International Corporation
20201 Century Boulevard, 3rd Floor
Germantown, MD 20874
301-353-8347 [Office]
301-606-6300 [Cell]
301-428-3713 [Fax]

-----Original Message-----

From: sradz@lanl.gov [<mailto:sradz@lanl.gov> <<mailto:sradz@lanl.gov>>]
Sent: Thursday, October 26, 2006 5:10 PM
To: Owens, Kirk W.
Cc: Folk, Kevin T.; John Isaacson; jnisengard@lanl.gov
Subject: Fwd: Re: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

Answers from our Gas SME are in blue below. It's a start.

Susan

X-Sieve: CMU Sieve 2.2
X-Mailer: QUALCOMM Windows Eudora Version 7.0.1.0
Date: Thu, 26 Oct 2006 14:48:32 -0600
To: "Susan D. Radzinski" <sradz@lanl.gov>, glmackey@lanl.gov
From: "Jerome F. Gonzales" <jerome@lanl.gov>

Subject: Re: FW: Remaining Data Needs to Update LANL SWEIS
Infrastructure

Cc: haugen@lanl.gov

X-PMX-Version: 4.7.1.128075

Susan,

My answers are in blue font below.

At 01:34 PM 10/26/2006, Susan D. Radzinski wrote:

Gilbert,

The bottom of this e-mail contains a follow-up request for clarification of information in the new SWEIS now in preparation. I am sending it to you because most, although not all, of the questions pertain to electricity. Will you please get necessary information from Jerry Gonzales and Jim Haugen for their areas of expertise. Of course, we are in a hurry. Is it possible to get this information sometime next week, if not sooner.

Many thx for your help.

Susan

X-Sieve: CMU Sieve 2.2

Subject: FW: Remaining Data Needs to Update LANL SWEIS Infrastructure

Date: Thu, 26 Oct 2006 13:24:46 -0400

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

Thread-Topic: Remaining Data Needs to Update LANL SWEIS Infrastructure

Thread-Index: Acby39dhYB31hZIfQ8S0rFcsiDPawgAKagvWAYQ7BCAAAWIj0A==

From: "Owens, Kirk W." <KIRK.W.OWENS@saic.com>

To: <sradz@lanl.gov>

Cc: "Folk, Kevin T." <KEVIN.T.FOLK@saic.com>,

"John Isaacson" <isaacson@lanl.gov>, <jnisengard@lanl.gov>

X-OriginalArrivalTime: 26 Oct 2006 17:25:08.0497 (UTC)

FILETIME=[AF300810:01C6F923]

Sender: KIRK.W.OWENS@saic.com

X-Proofpoint-Virus-Version: vendor=fsecure

engine=4.65.5446:2.3.11,1.2.37,4.0.164

definitions=2006-10-26_15:2006-10-26,2006-10-26,2006-10-26 signatures=0

X-Proofpoint-Spam: 0

X-PMX-Version: 4.7.1.128075

Susan,

As I mentioned on the call yesterday, there are some follow-up questions regarding utilities. Please see below.

Thanks,

Kirk Owens
SAIC
(301) 601-5611 (voice)
(301) 428-0145 (fax)

Project Status Questions:

- (1) Has construction of the transmission line from the Southern TA Substation to the Western TA Substation been completed; when was or will it be completed?
- (2) Has the construction of the new Southern TA switchyard been completed; when was or will it be completed?
- (3) Has the project to complete the uncrossing of the North and Reeves transmission lines been completed; when was or will it be completed?
- (4) Has the new 20-MW generator at the TA-3 Co-Generation Complex been brought on line; when was or will it be completed? The 20 Mw Combustion Turbine should be completed by the end of FY07.
- (5) Has construction of the new TA-50 substation been initiated; when did or will it start?
- (6) How many Electrical Infrastructure Safety Upgrade Projects have been completed since November 2005 (and which numbers); how many are under construction (and which numbers); and how many are in design (and which numbers)?
- (7) Has the tie-in of the new natural gas pipeline from TA-21 to TA-72 with the existing line been completed; when was or will it be completed? I believe that you are referencing the PNM line in Los Alamos Canyon. This line is 90% complete. PNM ran into a problem when they realized that there was a potential to exceed the maximum allowable operating pressure (MAOP) to the gas transmission line to White Rock and as of yet have not completed tie ins of this line. They are initiating a design to mitigate this problem.

For the projected completion date of the new line call Terry Connors. He is the point of contact on this project.

Facility-Specific Data Needs

Water and electric power consumption for Metropolis (previously provided by Nick Nagy)
If available, 2005 (CY or FY), water consumption for LANSCE.
If available, 2005 (CY or FY), water and electric power consumption for TA-55 facilities and/or PF-4.

Susan D. Radzinski
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Risk Reduction Office
Project Lead Annual SWEIS Yearbook
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