

核一廠 110 年第 3 季 放射性物質排放報告

台灣電力公司
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摘要

台灣電力公司(以下簡稱台電公司)第一核能發電廠(以下簡稱核一廠)已於 108 年 7 月正式進入除役階段，依游離輻射防護法、游離輻射安全標準與核能電廠環境輻射劑量設計規範，核能電廠排放至環境之廢氣及廢水的放射性核種濃度除了符合游離輻射防護安全標準，其依廢氣及廢水排放實績，利用計算模式進行關鍵群體輻射劑量評估結果亦必須符合核能電廠環境輻射劑量設計規範規定，以證明放射性廢氣、廢水排放造成之廠外民眾輻射劑量符合游離輻射安全標準之法規限值。

本報告內容涵蓋核一廠 110 年第 3 季放射性廢氣及廢水排放活度統計，以及依美國核管會 (NRC) 法規指引 R.G.1.109 之劑量評估模式發展之放射性廢氣及廢水排放民眾劑量評估程式評估結果，俾確認核能電廠所執行放射性排放管制措施符合法規要求。

110 年第 3 季核一廠兩部機因進入除役階段無惰性氣體排放，關鍵群體之有效劑量均為零，兩部機放射性廢水造成關鍵群體之有效劑量分別為 6.41E-03 微西弗與 1.45E-04 微西弗，均遠低於核能電廠環境輻射劑量設計規範之設計限值，亦遠低於法規限值。

本季未發生異常排放事件，放射性物質排放管制功能正常，民眾輻射防護管制成效安全指標實績評鑑結果呈現為代表安全的綠色指標燈示。

Abstract

Chinshan Nuclear Power Plant entered into the stage of decommissioning in July 2019. According to Safety Standards for Protection against Ionizing Radiation and the Guide to Environmental Radiation Dose for the Design of Nuclear Power Plant, Chinshan Nuclear Power Plant should control the radionuclide concentrations in air and water at the boundary of a radiation workplace not exceeding the concentrations specified in Safety Standards for Protection against Ionizing Radiation and evaluate the dose received by an individual in a critical group as calculated using the model in compliance with the dose limits in Design Guides on Environmental Radiological Dose for Nuclear Power Reactor to ensure the dose to the member of the public in compliance with the dose limits as specified in Safety Standards for Protection against Ionizing Radiation.

This report summarizes the quantities of radioactivity in liquid and gaseous effluents released from Chinshan Nuclear Power Plant. This report also includes the off-site radiation doses from all radioactive liquid and gaseous effluents released during the third quarter in 2021. The maximum individual doses and population doses were calculated by using the radiological exposure models described in US NRC Regulatory Guide 1.109 for radioactivity releases in liquid and gaseous effluents.

For this quarter, two units are in decommissioning and due to no noble gases released in gaseous effluents, the doses of critical group from each unit are zero. The dose of critical group due to liquid effluents released from the unit 1 and unit 2 are $6.41\text{E-}03$ μSv and $1.45\text{E-}04$ μSv respectively. All calculated doses are far below the dose limits specified in The Safety Standards of Protection against Ionizing Radiation and the dose criteria in the Guide to Environmental Radiation Dose for the Design of Nuclear Power Plant issued by ROCAEC (1990).

No abnormal radiological effluent release events occurred during the third quarter in 2021. The Public Radiation Safety performance in this quarter was normal and evaluated as “GREEN” light condition.

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1.0 前言

本公司核一廠一號機及二號機之機組運轉執照屆期日分別為 107 年 12 月 5 日及 108 年 7 月 15 日，故本公司依據「核子反應器設施管制法」第 23 條及「核子反應器設施除役許可申請審核辦法」第 2 條、第 3 條之規定，提出核一廠除役計畫，並於 108 年 7 月 12 日獲原能會核字第 1080007869 號函核發除役許可，於 108 年 7 月 16 日除役許可生效。核一廠在設計階段即以「合理抑低排放」為原則，設計放射性廢氣、廢水處理系統，有效降低放射性物質排放量。在除役階段則依行政院原子能委員會訂定之相關法規及該廠排放管制作業程序書，嚴格執行放射性廢氣、廢水排放管制，使機組除役對廠外之輻射影響減至最低程度，以達成兼顧「安全除役」和「環境保護」之目的。

為確保本公司核一廠排放至環境之廢氣及廢水的放射性核種濃度符合游離輻射防護安全標準，核一廠對於排放之廢氣及廢水均予以取樣、分析、記錄與統計，並於各排放口設置具有警報功能之流程輻射監測器，以確實掌握放射性廢氣、廢水的實際排放濃度。另依廢氣及廢水排放實績，利用計算模式進行廠外民眾輻射劑量評估，以證明放射性廢氣、廢水排放造成之廠外民眾輻射劑量符合法規限值。

有關放射性廢氣、廢水排放管制之法規如下：

- 1、核子反應器設施管制法
- 2、游離輻射防護法
- 3、放射性物料管理法
- 4、核子反應器設施管制法施行細則
- 5、游離輻射防護法施行細則
- 6、放射性物料管理法施行細則
- 7、游離輻射防護安全標準
- 8、核能電廠環境輻射劑量設計規範

2.0 放射性物質排放統計

2.1 廢氣、廢水排放監測狀況概述

因核一廠已進入除役階段，反應器停止運轉已無核分裂反應，廢氣之分裂及活化核種、碘及微粒均小於最低可測值，本季廢氣、廢水排放及監測情況正常，無任何異常排放事件發生。本季放射性廢氣、廢水排放統計季報表如【表一】及【表二】所示。

2.2 廢氣排放統計

本季放射性廢氣排放統計季報表如【表三】所示，分裂及活化氣體、碘、微粒、氬與氮-13 等各類排放核種連續四季排放量趨勢如【圖一】至【圖五】所示，本季一、二號機皆屬停機狀態，僅排放氬核種，排放量皆在正常變動範圍內，並無異常情形。

2.3 廢水排放統計

本季放射性廢水排放統計季報表如【表四】所示，分裂及活化核種、懸浮及溶解性氣體與氬等各類排放核種連續四季排放量趨勢如【圖六】、【圖七】、【圖八】所示，本季與以往相較，皆在正常變動範圍內，並無異常情形。

3.0 民眾劑量評估

3.1 法規依據

依據行政院原子能委員會民國 79 年 1 月 8 日會輻字第 0183 號函發布之核能電廠環境輻射劑量設計規範，核能電廠產生之放射性物質外釋造成廠外民眾劑量須符合下列規定：

(1) 放射性廢氣排放

【惰性氣體】

惰性氣體造成廠界任一民眾有效劑量不超過 50 微西弗/年/機組，空氣中加馬輻射劑量值不超過 100 微戈雷/年/機組，且貝他輻射劑量值不超過 200 微戈雷/年/機組。

【碘、氙及微粒】

碘、氙及微粒（半化期超過 8 天者）造成廠界任一民眾器官等價劑量不超過 150 微西弗/年/機組。

(2) 放射性廢水排放

放射性廢水排放造成任一民眾有效劑量不超過 30 微西弗/年/機組，任一民眾器官等價劑量不超過 100 微西弗/年/機組。

(3) 季劑量限制

任一日曆季劑量的限制，為(1)及(2)兩節所述年劑量限值的一半。

3.2 放射性廢氣排放

核一廠放射性廢氣排放造成之關鍵群體劑量評估係經過實際調查，考量空浸曝露、地表輻射、呼吸、農作物、肉類食用等關鍵輻射影響途徑，並以最近五年調查之當地居民生活飲食習慣為劑量評估參數，評估具有當地居民代表性之假設性群體劑量。

依本季放射性廢氣排放實績及氣象報表【如附件 8.1】，並利用本公司委託核能研究所發展之廢氣排放劑量評估程式 GASWIN 進行之廢氣排放途徑關鍵群體劑量評估，評估結果均符合核能電廠環境輻射劑量設計規範之規定，且與以往相較，皆在正常變動範圍內，並無異常情形。

3.2.1 惰性氣體造成之關鍵群體有效劑量

核一廠放射性惰性氣體主要經由一、二號機所共用之主煙囪排放，故其造成之關鍵群體有效劑量由兩部機共同分擔。本季一、二號機均無排放惰性氣體，因此關鍵群體有效劑量、空氣中加馬輻射與貝他輻射劑量均為零，遠低於每季每部機組之設計限值，詳如【表五】所示，連續四季惰性氣體造成關鍵群體有效劑量趨勢如【圖九】所示。

3.2.2 碘、氬及微粒造成之關鍵群體器官等價劑量

本季一、二號機放射性碘、氬及微粒等廢氣造成之關鍵群體器官等價劑量分別為 1.00E-02 微西弗、2.69E-02 微西弗，若排除無人口居住之方位，一、二號機關鍵群體等價劑量分別為 2.03E-03 微西弗及 5.46E-03 微西弗（皆落於西南西方）均遠低於每季每部機組之設計限值，詳如【表六】所示，連續四季碘、氬及微粒造成關鍵群體器官等價劑量趨勢如【圖十】所示。

3.2.3 放射性廢氣排放造成之民眾集體劑量

本季一、二號機放射性廢氣排放造成半徑 50 公里內，各距離方位平均個人劑量乘上其人口數所得之民眾集體有效劑量分別為 2.09E-05 人-西弗及 5.63E-05 人-西弗，而民眾器官集體等價劑量亦分別為 2.09E-05 人-西弗及

5.63E-05 人-西弗，詳如【表七】所示。

3.3 放射性廢水排放

核一廠放射性廢水排放造成之關鍵群體劑量評估係經過實際調查，考量海生物食用、海濱遊樂及游泳等關鍵輻射影響途徑，並以最近五年調查所得之當地居民生活飲食習慣為劑量評估參數，評估具有當地居民代表性之假設性群體劑量。

依本季放射性廢水排放實績及平均循環海水之流量【如表四】，利用本公司委託核能研究所發展之廢水排放劑量評估程式 LQWIN 進行之廢水排放途徑關鍵群體劑量評估，評估結果均符合核能電廠環境輻射劑量設計規範之規定，且與以往相較，皆在正常變動範圍內，並無異常情形。

3.3.1 放射性廢水排放造成之關鍵群體有效劑量

本季放射性廢水來自一、二號機、洗衣廠房、一、二號貯存庫及廢海水收集槽，來源有設備洩水、地面洩水、化學廢液、洗滌廢液、雜項廢水及廢氣坑道滲水等。造成關鍵群體有效劑量分別為 $6.41E-03$ 微西弗及 $1.45E-04$ 微西弗，詳如【表八】，連續四季廢水排放造成關鍵群體有效劑量趨勢如【圖十一】所示。

3.3.2 放射性廢水排放造成之關鍵群體器官等價劑量

本季一、二號機放射性廢水造成之關鍵群體器官等價劑量則分別為 $8.48E-03$ 微西弗及 $1.91E-04$ 微西弗，詳如【表八】，連續四季廢水排放造成關鍵群體器官等價劑量趨勢如【圖十二】所示。

3.3.3 放射性廢水排放造成之民眾集體劑量

本季一、二號機放射性廢水排放造成半徑 50 公里範圍內，各距離方位平均個人劑量乘上其人口數所得之民眾集體有效劑量各為 $3.23E-05$ 人-西弗及 $7.08E-07$ 人-西弗，而民眾器官集體等價劑量為 $9.42E-05$ 人-西弗及 $2.09E-06$ 人-西弗，詳如【表九】所示。

4.0 民眾輻射防護管制成效安全指標實績

4.1 指標定義

依本公司「核能電廠安全績效指標評鑑作業要點」，為評估放射性物質排放管制計畫（radiological effluent control program）的績效，收集前 7 季每座電廠發生超過下表限值的放射性物質排放外釋事件數，以電廠前四季放射性物質排放發生放射性物質排放事件的件數定義為「民眾輻射防護管制成效安全指標實績」指標值，並將指標評鑑結果以綠、白、黃、紅等四種顏色判定績效優或劣狀況，作為管制電廠採寬或嚴之依據，諸如：綠色實績者維持例行管制，白色者採加強監督，黃色者採限期改善，出現紅色者則禁止機組運轉。

| 放射性物質（氣體、液體）排放造成民眾劑量超過下列值 | | |
|---------------------------|---------------------------|--|
| 液體途徑 | 全身劑量 | 15 $\mu\text{Sv}/\text{qtr}/\text{site}$ |
| | 器官劑量 | 50 $\mu\text{Sv} / \text{qtr}/\text{site}$ |
| 氣體途徑 | 空氣加馬輻射劑量 | 50 $\mu\text{Gy}/\text{qtr}/\text{site}$ |
| | 空氣貝他輻射劑量 | 100 $\mu\text{Gy}/\text{qtr}/\text{site}$ |
| | 器官劑量 | 75 $\mu\text{Sv} / \text{qtr}/\text{site}$ |
| | （由碘-131、碘-133、 氫及微粒造成） | |

註：

1. 上述各值由各廠廠外輻射劑量計算手冊（ODCM）評估而得。
2. 上述依照放射性物質排放運轉規範(RETs)/ 廠外輻射劑量計算手冊(ODCM)所訂的劑量值在應用上以每一機組為基準。
3. 針對多機組電廠，經由共同排放點（common discharge points）外釋時，依 ODCM 所提供的方法（methodology）計算每一機組所貢獻的劑量。

4.2 指標實績

核一廠 110 年第 3 季「民眾輻射防護管制成效安全指標」實績值皆為 0.00，如附圖十三所示。

5.0 結語

本公司核一廠本季廢氣、廢水排放及監測情況均正常，無任何異常排放事件發生，且本季一、二號機均無惰性氣體排放，經評估關鍵群體有效劑量均為零，一、二號機放射性廢水造成之關鍵群體有效劑量分別為 $6.41E-03$ 微西弗及 $1.45E-04$ 微西弗，均符合核能電廠環境輻射劑量設計規範之規定，亦遠低於法規限值。未來本公司核一廠仍繼續秉持合理抑低之原則，嚴格執行放射性物質排放管制，並加強廠區及環境輻射監測，使機組除役對廠外之輻射影響減至最低之程度。

6.0 附表

表一 核一廠廢氣排放量統計表

| 廢 氣 | 排 放 量 (貝 克) | | | | |
|-----|----------------|--------------|------|----------|------|
| | 排放源 | 分裂及活化 氣 體 | 碘 | 微 粒 | 氫 |
| 主煙囪 | <MDA | <MDA | <MDA | 1.66E+06 | <MDA |
| 一號機 | <MDA | <MDA | <MDA | 7.25E+09 | <MDA |
| 二號機 | <MDA | <MDA | <MDA | 1.95E+10 | <MDA |
| 總 計 | <MDA | <MDA | <MDA | 2.68E+10 | <MDA |

表二 核一廠廢水排放量統計表

| 廢 水 排放源 | 排 放 量 (貝 克) | | |
|------------|----------------|---------------|----------|
| | 分裂及活化 核 種 | 懸浮及溶解性 氣 體 | 氫 |
| 一號機 | 6.17E+06 | <MDA | 6.75E+08 |
| 二號機 | 1.14E+05 | <MDA | 4.81E+08 |
| 總 計 | 6.28E+06 | <MDA | 1.16E+09 |

表三 核一廠放射性廢氣排放統計季報表

| 排放點 | 主煙囪 | 一號機 | 二號機 |
|---------------|----------|----------|----------|
| 1、分裂及活化氣體 | | 排放量(Bq) | |
| Ar - 41 | <MDA | <MDA | <MDA |
| Kr - 85m | <MDA | <MDA | <MDA |
| Kr - 87 | <MDA | <MDA | <MDA |
| Kr - 88 | <MDA | <MDA | <MDA |
| Xe - 131m | <MDA | <MDA | <MDA |
| Xe - 133 | <MDA | <MDA | <MDA |
| Xe - 133m | <MDA | <MDA | <MDA |
| Xe - 135 | <MDA | <MDA | <MDA |
| Xe - 135m | <MDA | <MDA | <MDA |
| Xe - 138 | <MDA | <MDA | <MDA |
| 2、碘 | | | |
| I - 131 | <MDA | <MDA | <MDA |
| I - 133 | <MDA | <MDA | <MDA |
| I - 135 | <MDA | <MDA | <MDA |
| 3、微粒 | | | |
| Ag - 110m | <MDA | <MDA | <MDA |
| Ba - La - 140 | <MDA | <MDA | <MDA |
| Co - 60 | <MDA | <MDA | <MDA |
| Cs - 134 | <MDA | <MDA | <MDA |
| Cs - 137 | <MDA | <MDA | <MDA |
| Mn - 54 | <MDA | <MDA | <MDA |
| Sr - 89 | <MDA | <MDA | <MDA |
| Sr - 90 | <MDA | <MDA | <MDA |
| 4、氫 | | | |
| H - 3 | 1.66E+06 | 7.25E+09 | 1.95E+10 |
| 5、氮 - 13 | | | |
| N - 13 | <MDA | <MDA | <MDA |

表四 核一廠放射性廢水排放統計季報表

| 排 放 點 | 一 號 機 | 二 號 機 |
|-----------------------|-----------|----------|
| 1、分裂及活化核種 | 排 放 量(Bq) | |
| Ag - 110m | <MDA | <MDA |
| Co - 58 | <MDA | <MDA |
| Co - 60 | 5.04E+06 | 1.14E+05 |
| Cr - 51 | <MDA | <MDA |
| Cs - 134 | <MDA | <MDA |
| Cs - 137 | 1.13E+06 | <MDA |
| Fe - 55 | <MDA | <MDA |
| I - 131 | <MDA | <MDA |
| I - 132 | <MDA | <MDA |
| I - 133 | <MDA | <MDA |
| I - 134 | <MDA | <MDA |
| Mn - 54 | <MDA | <MDA |
| Mn - 56 | <MDA | <MDA |
| Nb - 97 | <MDA | <MDA |
| Sb - 124 | <MDA | <MDA |
| Sr - 89 | <MDA | <MDA |
| Sr - 90 | <MDA | <MDA |
| 2、懸浮及溶解性氣體 | | |
| Xe - 135 | <MDA | <MDA |
| 3、氚 | | |
| H - 3 | 6.75E+08 | 4.81E+08 |
| 4、平均體積排放率 | | |
| (m ³ /sec) | 1.48E+01 | 1.47E+01 |

表五 核一廠放射性廢氣造成之關鍵群體有效劑量

| 情 性 氣 體 | | |
|------------------------|----------|----------|
| 方 位 | - | - |
| 機 組 | 一號機 | 二號機 |
| 有效劑量 途徑：空浸 (微西弗) | 0.00E+00 | 0.00E+00 |
| 每季設計限值 (微西弗) | 25 | 25 |
| 與限值比 | 0.00E+00 | 0.00E+00 |
| 空氣加馬輻射 (微戈雷) | 0.00E+00 | 0.00E+00 |
| 每季設計限值 (微戈雷) | 50 | 50 |
| 與限值比 | 0.00E+00 | 0.00E+00 |
| 空氣貝他輻射 (微戈雷) | 0.00E+00 | 0.00E+00 |
| 每季設計限值 (微戈雷) | 100 | 100 |
| 與限值比 | 0.00E+00 | 0.00E+00 |

註:

1. 主煙囪排放係一、二號機共用，故每部機造成關鍵群體有效劑量係由主煙囪劑量貢獻之二分之一與個別機組廠房煙囪之劑量貢獻加總。
2. 本季主煙囪與兩部機廠房煙囪均無惰性氣體排放，故其關鍵群體有效劑量與空氣加馬、空氣貝他輻射劑量均為 0.0。

表六 核一廠放射性廢氣造成之關鍵群體器官等價劑量

| 碘、微粒、氫 | | |
|-----------------|------------------|------------------|
| 方位 | NE | NE |
| 機組 | 一號機 | 二號機 |
| 輻射影響途徑 | 腎上腺等價劑量 (微西弗) | 腎上腺等價劑量 (微西弗) |
| 地面沉積 | 0.00E+00 | 0.00E+00 |
| 農作物 | 5.40E-03 | 1.45E-02 |
| 肉類 | 1.60E-05 | 4.31E-05 |
| 呼吸 | 4.61E-03 | 1.24E-02 |
| 合計 | 1.00E-02 | 2.69E-02 |
| 每季設計限值 (微西弗) | 75 | 75 |
| 與限值比 | 1.33E-04 | 3.59E-04 |

註:

1. 主煙囪排放係一、二號機共用，故每部機造成關鍵群體器官等價劑量係由主煙囪劑量貢獻之二分之一與個別機組廠房煙囪之劑量貢獻加總。
2. 本季僅排放氫核種，依美國 EPA (2002), Federal Guidance Report 13，氫核種地面沉積之體外劑量係數為 0.0，故該途徑之輻射劑量評估結果為 0.0。
3. 本評估為更求保守性，將十六方位皆納入評估，結果顯示本季一、二號機關鍵群體方位均落於東北方(無人口居住)，若僅考慮具有人口居住之方位，一、二號機造成關鍵群體器官等價劑量為 2.03E-03 及 5.46E-03 微西弗 (方位：西南西方，器官：腎上腺)。

表七 核一廠放射性廢氣排放造成之民眾集體劑量

| 排 放 類 別 | 廢 氣 | |
|---------|----------|----------|
| 機 組 | 一 號 機 | |
| 集 體 劑 量 | 有效劑量 | 腎上腺等價劑量 |
| (人-西弗) | 2.09E-05 | 2.09E-05 |
| 機 組 | 二 號 機 | |
| 集 體 劑 量 | 有效劑量 | 腎上腺等價劑量 |
| (人-西弗) | 5.63E-05 | 5.63E-05 |

表八 核一廠放射性廢水造成之關鍵群體
有效劑量暨器官等價劑量

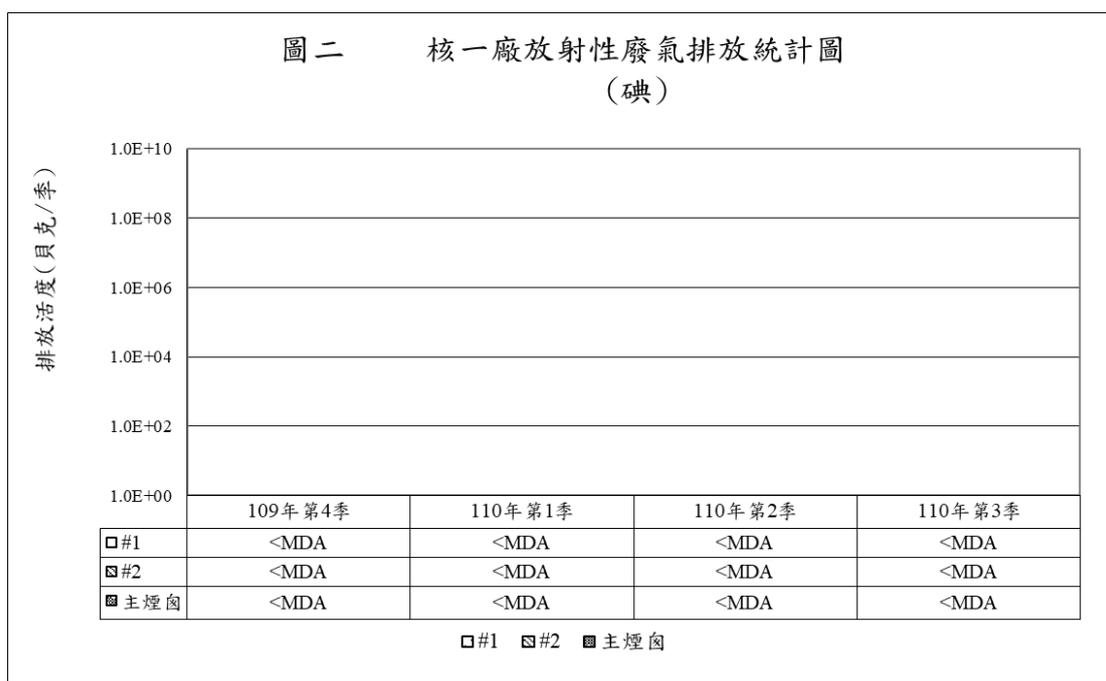
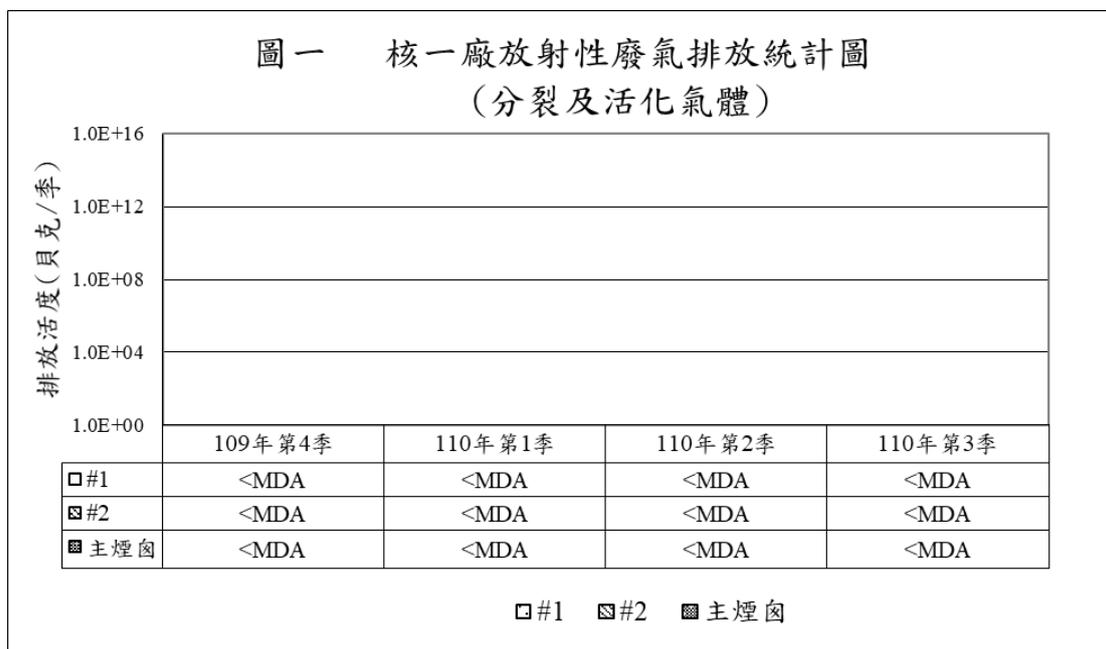
| 一號機 輻射影響途徑 | 有效劑量 (微西弗) | 骨表面等價劑量 (微西弗) |
|-----------------|---------------|------------------|
| 魚類 | 1.06E-04 | 7.57E-05 |
| 無脊椎生物 | 1.46E-04 | 8.74E-05 |
| 海藻 | 5.38E-06 | 3.27E-06 |
| 海濱遊樂 | 6.15E-03 | 8.31E-03 |
| 游泳 | 1.04E-06 | 1.57E-06 |
| 合計 | 6.41E-03 | 8.48E-03 |
| 每季設計限值 (微西弗) | 15 | 50 |
| 與限值比 | 4.27E-04 | 1.70E-04 |

| 二號機 輻射影響途徑 | 有效劑量 (微西弗) | 骨表面等價劑量 (微西弗) |
|-----------------|---------------|------------------|
| 魚類 | 2.13E-06 | 1.40E-06 |
| 無脊椎生物 | 3.30E-06 | 1.97E-06 |
| 海藻 | 1.19E-07 | 7.10E-08 |
| 海濱遊樂 | 1.39E-04 | 1.88E-04 |
| 游泳 | 2.36E-08 | 3.54E-08 |
| 合計 | 1.45E-04 | 1.91E-04 |
| 每季設計限值 (微西弗) | 15 | 50 |
| 與限值比 | 9.64E-06 | 3.83E-06 |

表九 核一廠放射性廢水排放造成之民眾集體劑量

| 排 放 類 別 | 廢 水 | |
|---------|----------|----------|
| 機 組 | 一號機 | |
| 集 體 劑 量 | 有效劑量 | 下大腸壁等價劑量 |
| (人—西弗) | 3.23E-05 | 9.42E-05 |
| 機 組 | 二號機 | |
| 集 體 劑 量 | 有效劑量 | 下大腸壁等價劑量 |
| (人—西弗) | 7.08E-07 | 2.09E-06 |

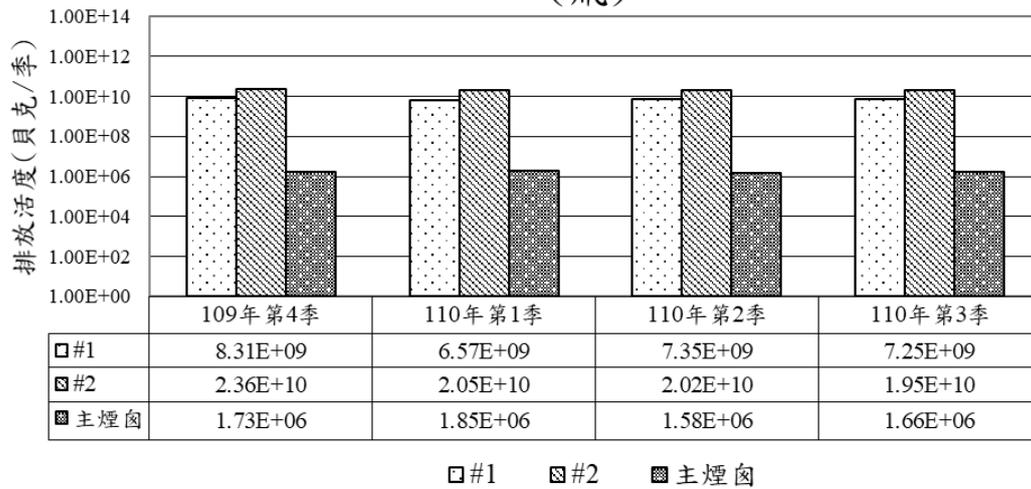
7.0 附圖



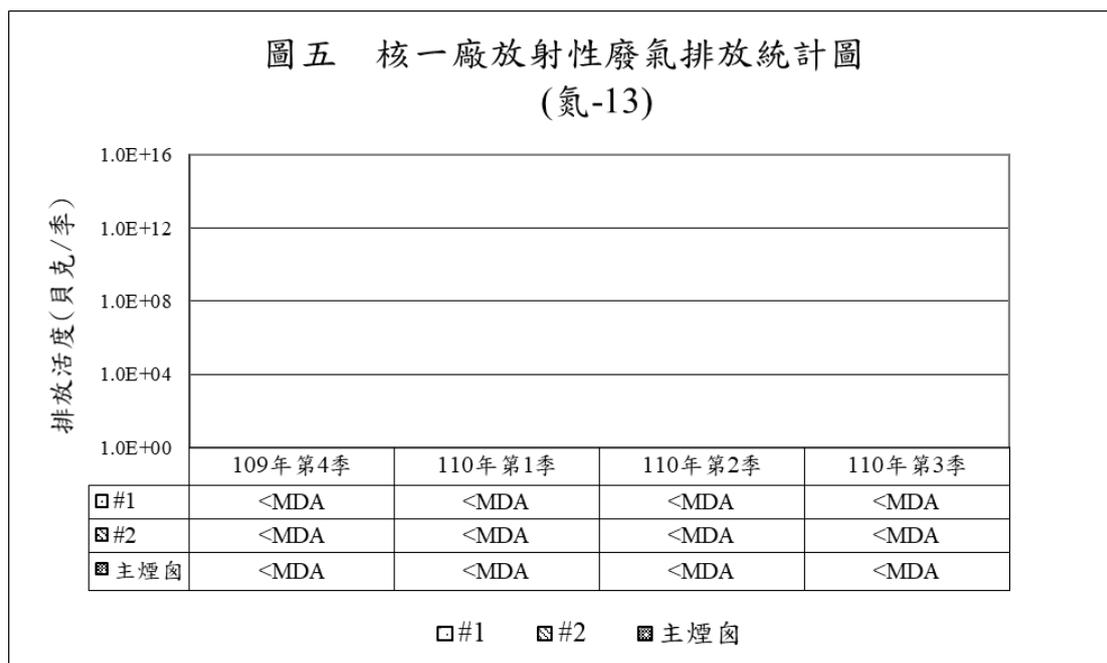
圖三 核能一廠放射性廢氣排放統計圖
(微粒)



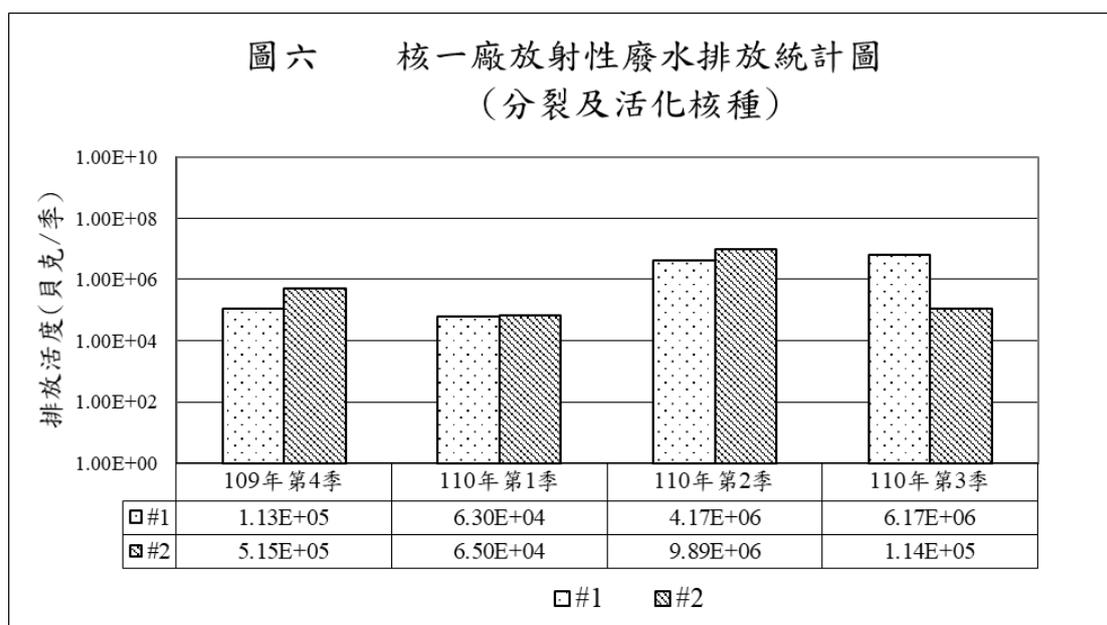
圖四 核一廠放射性廢氣排放統計圖
(氫)



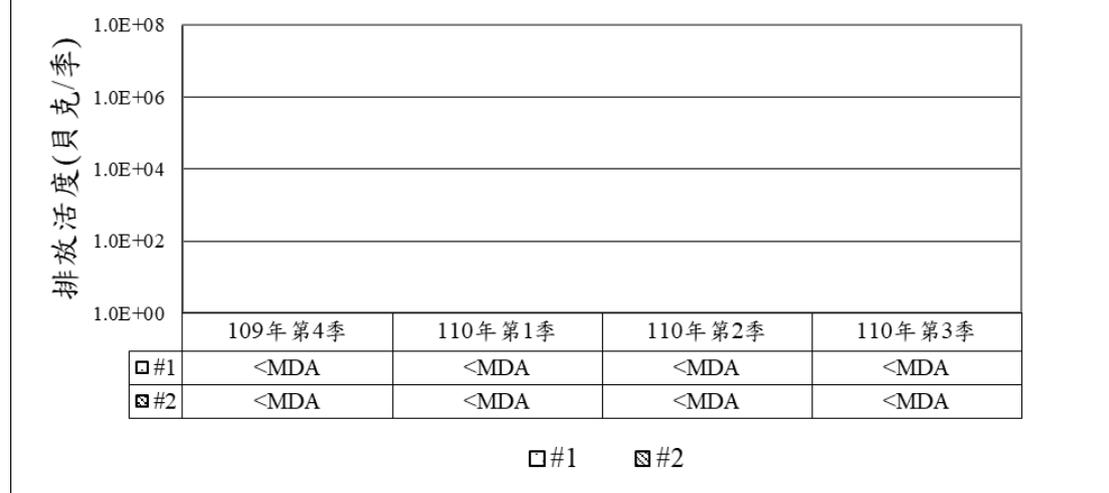
圖五 核一廠放射性廢氣排放統計圖
(氮-13)



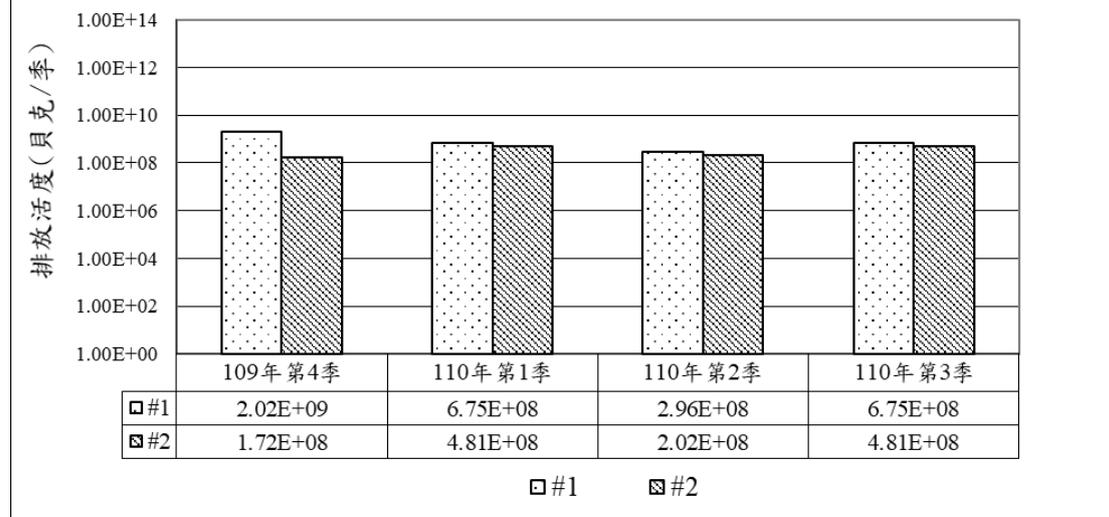
圖六 核一廠放射性廢水排放統計圖
(分裂及活化核種)



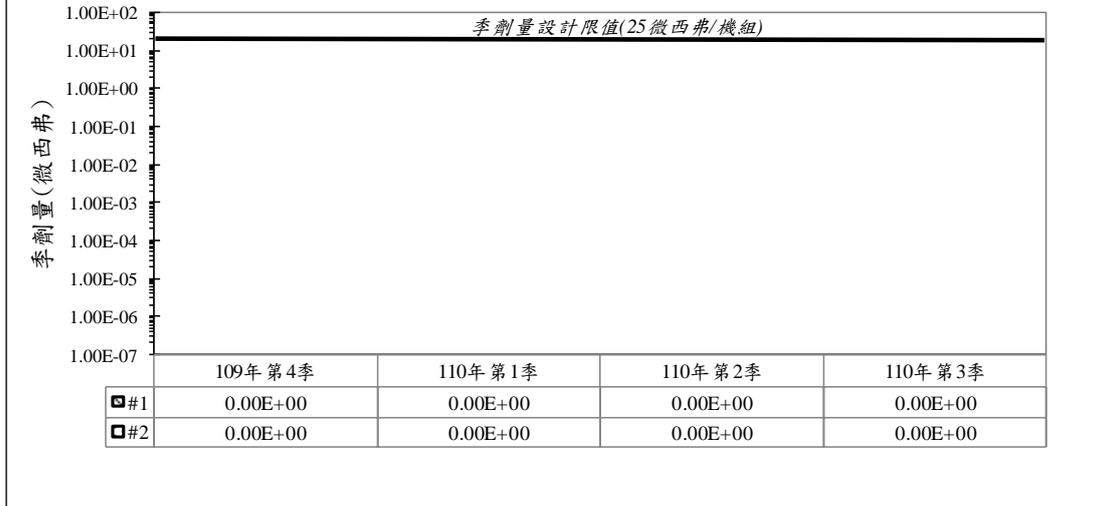
圖七 核一廠放射性廢水排放統計圖
(懸浮及溶解性氣體)



圖八 核一廠放射性廢水排放統計圖
(氫)

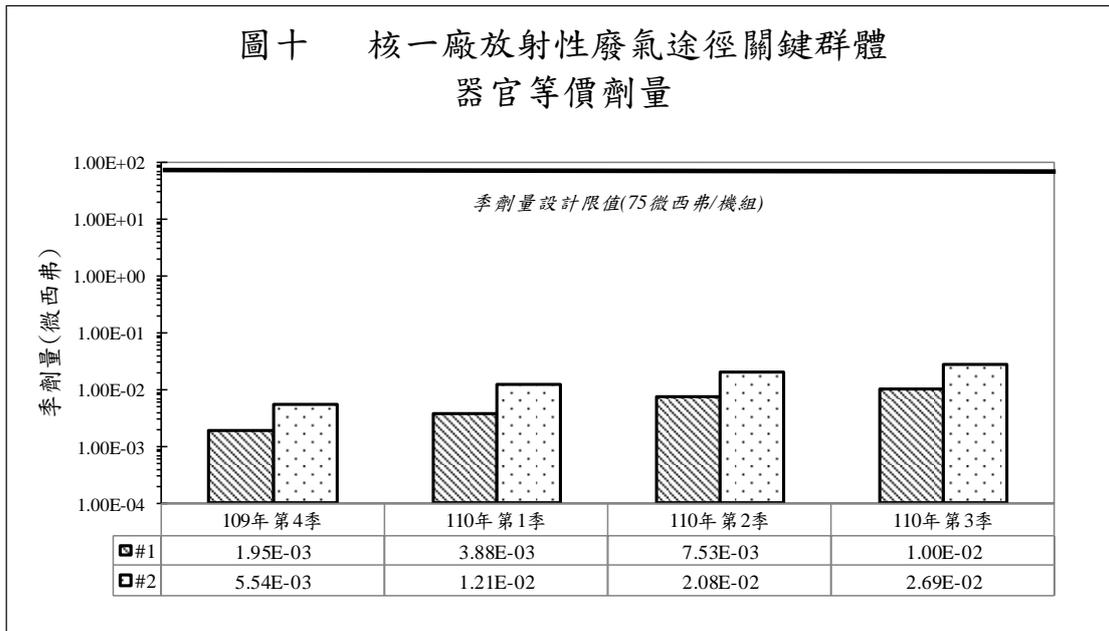


圖九 核一廠放射性廢氣途徑關鍵群體有效劑量

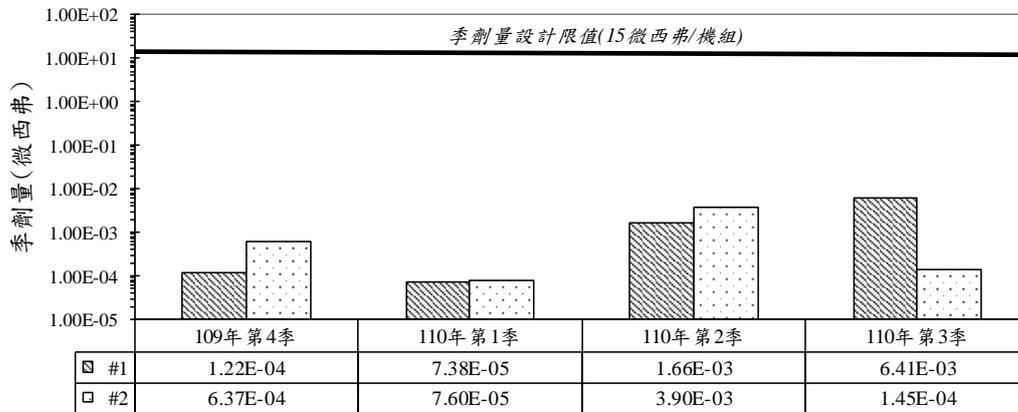


■本季兩部機均無惰性氣體排放，故其關鍵群體有效劑量均為零。

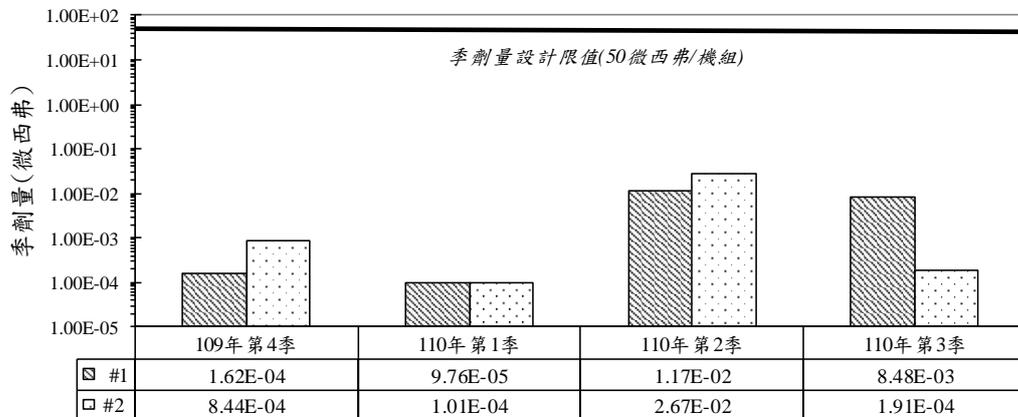
圖十 核一廠放射性廢氣途徑關鍵群體器官等價劑量



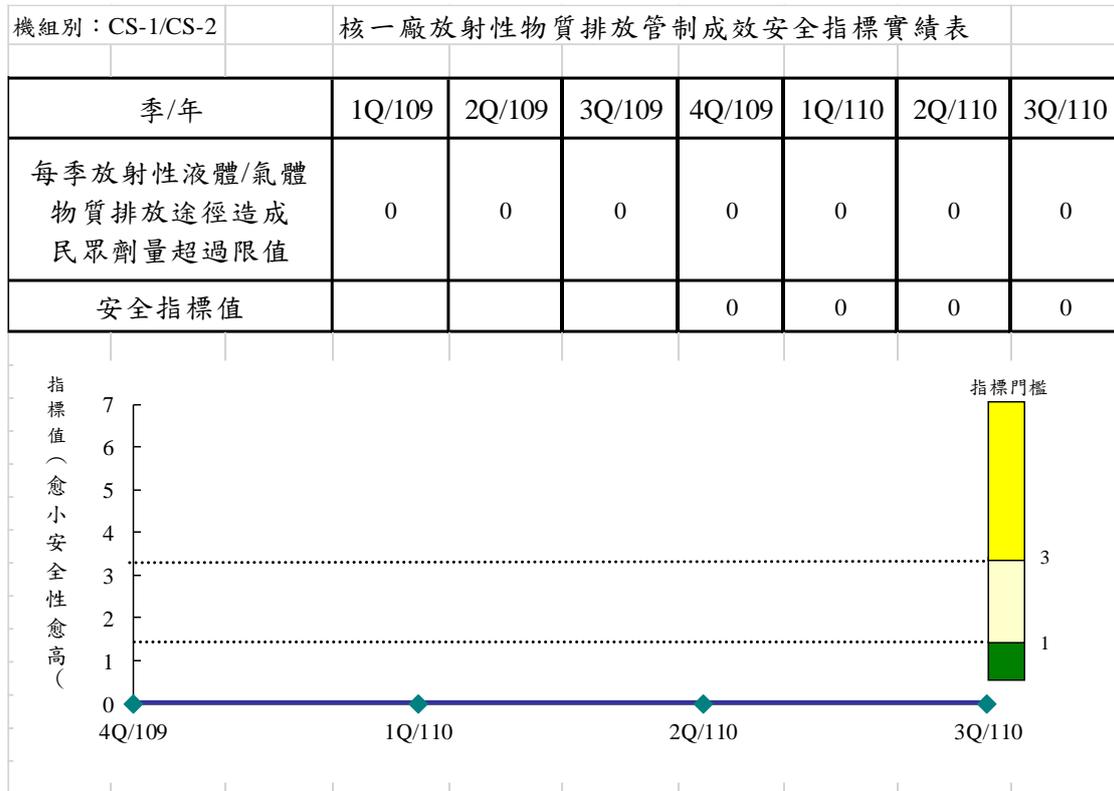
圖十一 核一廠放射性廢水途徑關鍵群體
有效劑量



圖十二 核一廠放射性廢水途徑關鍵群體
器官等價劑量



圖十三 核一廠民眾輻射防護管制成效安全指標實績

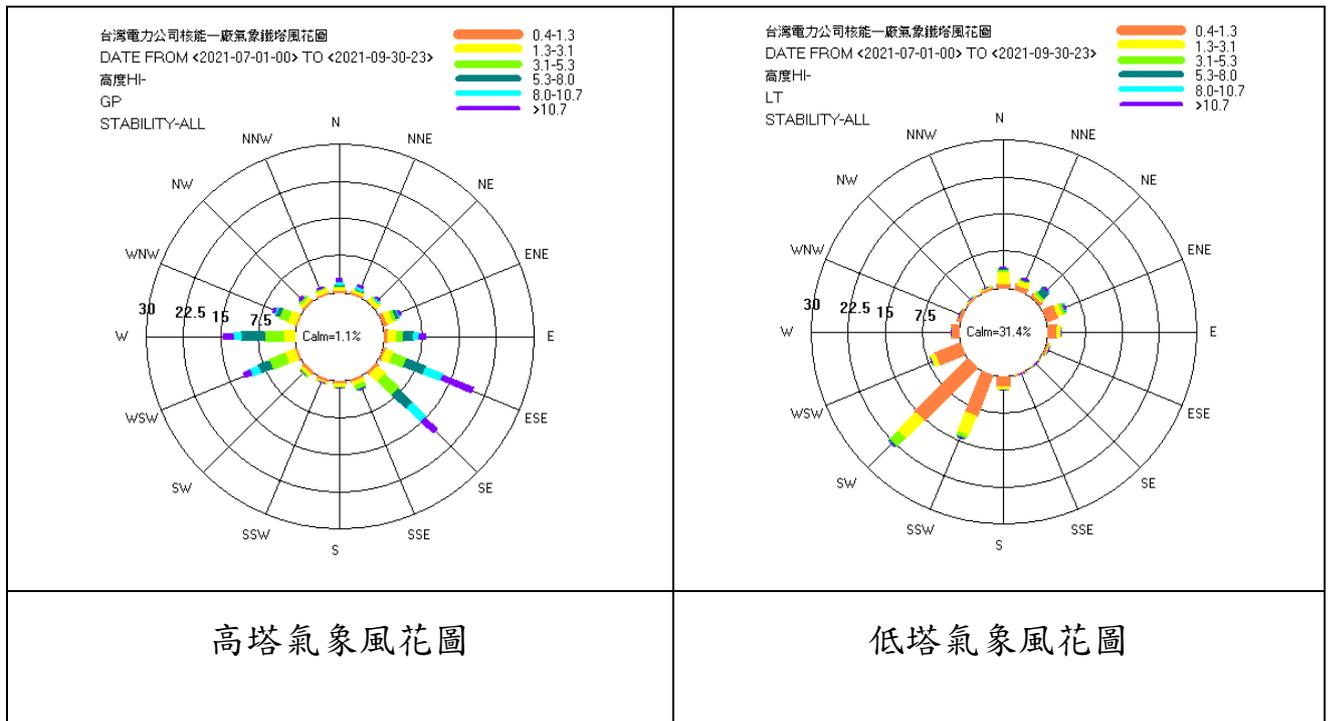


8.0 附件

8.1 氣象資料

依本季核一廠氣象及雨量資料顯示：

- 1、本季總時數為 2208 小時，紀錄時數為 2208 小時，擷取率為 100%。
高塔靜風比例為 1.087%，低塔靜風比例為 31.386%。
- 2、本季（110 年 7 月至 9 月）夏秋交接天氣型態，以東南風系及西風系為主，如風花圖所示。
- 3、本季降雨共計 25 天（7 月：9 日、8 月：9 日及 9 月：7 日），而累積降雨量共達 419.0 mm（7 月：243.0 mm、8 月：134.0 mm 及 9 月：42.0 mm）。



(1) 核一廠 110 年第 3 季高塔氣象報表

1*** METEOROLOGICAL MONTHLY CALCULATION DATA REPORT ***
DATE FROM <2021-07-01-00> TO <2021-09-30-23>
0 SELECTED DAILY MET. DATA RECORDS NUMBER MUST = 2208.
THE NUMBER OF RECORDS IN THE SELECTED INTERVAL = 2208
THE DATA COLLECTING RATE= 100.00 %

0
0 METEOROLOGICAL SIGNAL TABLE :
DESCRIPTION OG-LO(86M) OG-HI(140M) LOW-LO(10M) LOW-HI(33M)
TEMP (1- 6) 1 2 5 6
W/S GP(7-12) 7 8 11 12
W/S LT(13-18) 13 14 17 18
W/D GP(19-24) 19 20 23 24
W/D LT(25-30) 25 26 29 30

0
THE SELECTED WIND SPEED SENSOR IS [8]
THE SELECTED WIND DIRECTION SENSOR IS [20]

0
JFDT TABLE FOR STACK RELEASE
***TOTAL NO OF OBSERVATION= 2208.000 ***

1

ACCUMULATIVE FREQUENCY DISTRIBUTION'S
OF WIND SPEED CATEGORIES AND WIND DIRECTION SECTORS
BY ATMOSPHERIC STABILITY CATEGORIES

FREQUENCY OF CALM = 1.087
STABILITY: A B C D E F G
CALM 0.000 0.000 0.000 0.408 0.679 0.000 0.000

1

STABILITY-A (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1

STABILITY-B (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1

STABILITY-C (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1

STABILITY-D (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.32 | 0.27 | 0.23 | 0.00 | 0.18 | 0.14 | 1.13 |
| NNE | 0.32 | 0.27 | 0.05 | 0.05 | 0.18 | 0.05 | 0.91 |
| NE | 0.14 | 0.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 |
| ENE | 0.41 | 0.59 | 0.05 | 0.18 | 0.00 | 0.00 | 1.22 |
| E | 0.32 | 0.72 | 0.41 | 0.05 | 0.00 | 0.00 | 1.49 |
| ESE | 0.27 | 0.86 | 0.82 | 0.36 | 0.00 | 0.00 | 2.31 |
| SE | 0.23 | 0.77 | 1.04 | 0.36 | 0.00 | 0.00 | 2.40 |
| SSE | 0.14 | 0.23 | 0.05 | 0.00 | 0.00 | 0.00 | 0.41 |
| S | 0.05 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| SSW | 0.18 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 |
| SW | 0.14 | 0.14 | 0.14 | 0.00 | 0.00 | 0.00 | 0.41 |
| WSW | 0.18 | 1.04 | 1.77 | 0.54 | 0.14 | 0.59 | 4.26 |
| W | 0.00 | 0.63 | 2.49 | 2.26 | 0.41 | 0.41 | 6.20 |
| WNW | 0.09 | 0.91 | 1.04 | 0.36 | 0.14 | 0.23 | 2.76 |
| NW | 0.18 | 0.27 | 0.18 | 0.00 | 0.00 | 0.23 | 0.86 |
| NNW | 0.27 | 0.41 | 0.23 | 0.00 | 0.00 | 0.09 | 1.00 |
| TOTAL | 3.22 | 8.02 | 8.47 | 4.17 | 1.04 | 1.72 | 26.63 |

1

STABILITY-E (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.14 | 0.27 | 0.14 | 0.09 | 0.50 | 0.68 | 1.81 |
| NNE | 0.14 | 0.32 | 0.00 | 0.14 | 0.45 | 0.23 | 1.27 |
| NE | 0.14 | 0.45 | 0.05 | 0.05 | 0.36 | 0.09 | 1.13 |
| ENE | 0.41 | 0.72 | 0.68 | 0.45 | 0.32 | 0.14 | 2.72 |
| E | 0.27 | 1.09 | 1.00 | 1.81 | 1.27 | 1.31 | 6.75 |
| ESE | 0.23 | 0.86 | 2.08 | 3.85 | 3.76 | 6.66 | 17.44 |
| SE | 0.41 | 1.36 | 2.90 | 3.76 | 3.85 | 3.35 | 15.63 |
| SSE | 0.41 | 0.68 | 0.82 | 0.18 | 0.00 | 0.00 | 2.08 |
| S | 0.54 | 0.45 | 0.14 | 0.00 | 0.00 | 0.00 | 1.13 |
| SSW | 0.41 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 |
| SW | 0.45 | 0.50 | 0.09 | 0.00 | 0.00 | 0.00 | 1.04 |
| WSW | 0.27 | 1.09 | 1.72 | 1.95 | 1.72 | 0.82 | 7.56 |
| W | 0.14 | 1.54 | 1.40 | 2.36 | 1.18 | 1.72 | 8.33 |
| WNW | 0.23 | 0.86 | 0.77 | 0.50 | 0.14 | 0.18 | 2.67 |
| NW | 0.36 | 0.54 | 0.23 | 0.00 | 0.00 | 0.23 | 1.36 |
| NNW | 0.14 | 0.45 | 0.05 | 0.00 | 0.00 | 0.09 | 0.72 |
| TOTAL | 4.66 | 11.41 | 12.05 | 15.13 | 13.54 | 15.49 | 72.28 |

1

STABILITY-F (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1

STABILITY-G (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1

STABILITY-ALL (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.45 | 0.54 | 0.36 | 0.09 | 0.68 | 0.82 | 2.94 |
| NNE | 0.45 | 0.59 | 0.05 | 0.18 | 0.63 | 0.27 | 2.17 |
| NE | 0.27 | 1.09 | 0.05 | 0.05 | 0.36 | 0.09 | 1.90 |
| ENE | 0.82 | 1.31 | 0.72 | 0.63 | 0.32 | 0.14 | 3.94 |
| E | 0.59 | 1.81 | 1.40 | 1.86 | 1.27 | 1.31 | 8.24 |
| ESE | 0.50 | 1.72 | 2.90 | 4.21 | 3.76 | 6.66 | 19.75 |
| SE | 0.63 | 2.13 | 3.94 | 4.12 | 3.85 | 3.35 | 18.03 |
| SSE | 0.54 | 0.91 | 0.86 | 0.18 | 0.00 | 0.00 | 2.49 |
| S | 0.59 | 0.59 | 0.14 | 0.00 | 0.00 | 0.00 | 1.31 |
| SSW | 0.59 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.95 |
| SW | 0.59 | 0.63 | 0.23 | 0.00 | 0.00 | 0.00 | 1.45 |
| WSW | 0.45 | 2.13 | 3.49 | 2.49 | 1.86 | 1.40 | 11.82 |
| W | 0.14 | 2.17 | 3.89 | 4.62 | 1.59 | 2.13 | 14.54 |
| WNW | 0.32 | 1.77 | 1.81 | 0.86 | 0.27 | 0.41 | 5.43 |
| NW | 0.54 | 0.82 | 0.41 | 0.00 | 0.00 | 0.45 | 2.22 |
| NNW | 0.41 | 0.86 | 0.27 | 0.00 | 0.00 | 0.18 | 1.72 |
| TOTAL | 7.88 | 19.43 | 20.52 | 19.29 | 14.58 | 17.21 | 98.91 |

IPRINTOUT OF INPUT CARDS

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0 1 11100 00000 01100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
2 XOQDOQ - TPC NPP # 1
3 7 7 10 5 0 1 0
4 140.00 101.00 2.26 -8.00 0.00
5 0.000 0.000 0.000 0.408 0.679 0.000 0.000
7 0. 0.440 1.330 3.110 5.330 8.000 10.670 15.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
10 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000.
11 103. 114. 114. 63. 63. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 100. 103.
10 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000.
11 189. 130. 114. 63. 63. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 152. 133.
10 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000.
11 213. 149. 160. 110. 58. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 152. 189.
10 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000.
11 339. 360. 102. 110. 58. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 244. 390.
10 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000.
11 370. 320. 0. 54. 36. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 262. 345.
10 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000.
11 371. 285. 219. 219. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 48. 322.
10 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000.
11 371. 741. 441. 147. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 182.
10 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000.
11 371. 650. 373. 153. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
10 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000.
11 561. 700. 373. 70. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 100.
10 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000.
11 225. 750. 737. 50. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 150.
15 EXIT ONE - BUILDING VENT -NO PURGE RELEASE
16 0.000 0.000 -234.0 56.0 1875.0 10.0 0.00
17 A 0 0 0
XOQDOQ - TPC NPP # 1

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JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION

ATMOSPHERIC STABILITY CLASS A

| UOMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | ATMOSPHERIC STABILITY CLASS B | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | ATMOSPHERIC STABILITY CLASS C | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | ATMOSPHERIC STABILITY CLASS D | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.040 | 0.040 | 0.017 | 0.052 | 0.040 | 0.034 | 0.029 | 0.017 | 0.006 | 0.023 | 0.017 | 0.023 | 0.000 | 0.011 | 0.023 | 0.034 | 0.408 |
| 1.33 | 0.317 | 0.317 | 0.136 | 0.408 | 0.317 | 0.272 | 0.226 | 0.136 | 0.045 | 0.181 | 0.136 | 0.181 | 0.000 | 0.091 | 0.181 | 0.272 | 3.216 |
| 3.11 | 0.272 | 0.272 | 0.634 | 0.589 | 0.725 | 0.861 | 0.770 | 0.226 | 0.136 | 0.136 | 0.136 | 1.042 | 0.634 | 0.906 | 0.272 | 0.408 | 8.016 |
| 5.33 | 0.226 | 0.045 | 0.000 | 0.045 | 0.408 | 0.815 | 1.042 | 0.045 | 0.000 | 0.000 | 0.136 | 1.766 | 2.491 | 1.042 | 0.181 | 0.226 | 8.469 |
| 8.00 | 0.000 | 0.045 | 0.000 | 0.181 | 0.045 | 0.362 | 0.362 | 0.000 | 0.000 | 0.000 | 0.000 | 0.543 | 2.264 | 0.362 | 0.000 | 0.000 | 4.167 |
| 10.67 | 0.181 | 0.181 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.136 | 0.408 | 0.136 | 0.000 | 0.000 | 1.042 |
| 15.00 | 0.136 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.589 | 0.408 | 0.226 | 0.226 | 0.091 | 1.721 |
| TOTAL | 1.17 | 0.95 | 0.79 | 1.27 | 1.53 | 2.34 | 2.43 | 0.42 | 0.19 | 0.34 | 0.42 | 4.28 | 6.20 | 2.77 | 0.88 | 1.03 | 27.04 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | ATMOSPHERIC STABILITY CLASS E | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.020 | 0.020 | 0.020 | 0.059 | 0.040 | 0.033 | 0.059 | 0.059 | 0.079 | 0.059 | 0.066 | 0.040 | 0.020 | 0.033 | 0.053 | 0.020 | 0.679 |
| 1.33 | 0.136 | 0.136 | 0.136 | 0.408 | 0.272 | 0.226 | 0.408 | 0.408 | 0.543 | 0.408 | 0.453 | 0.272 | 0.136 | 0.226 | 0.362 | 0.136 | 4.665 |
| 3.11 | 0.272 | 0.317 | 0.453 | 0.725 | 1.087 | 0.861 | 1.359 | 0.679 | 0.453 | 0.226 | 0.498 | 1.087 | 1.540 | 0.861 | 0.543 | 0.453 | 11.413 |
| 5.33 | 0.136 | 0.000 | 0.045 | 0.679 | 0.996 | 2.083 | 2.899 | 0.815 | 0.136 | 0.000 | 0.091 | 1.721 | 1.404 | 0.770 | 0.226 | 0.045 | 12.047 |
| 8.00 | 0.091 | 0.136 | 0.045 | 0.453 | 1.812 | 3.850 | 3.759 | 0.181 | 0.000 | 0.000 | 0.000 | 1.947 | 2.355 | 0.498 | 0.000 | 0.000 | 15.127 |
| 10.67 | 0.498 | 0.453 | 0.362 | 0.317 | 1.268 | 3.759 | 3.850 | 0.000 | 0.000 | 0.000 | 0.000 | 1.721 | 1.178 | 0.136 | 0.000 | 0.000 | 13.542 |
| 15.00 | 0.679 | 0.226 | 0.091 | 0.136 | 1.313 | 6.658 | 3.351 | 0.000 | 0.000 | 0.000 | 0.000 | 0.815 | 1.721 | 0.181 | 0.226 | 0.091 | 15.489 |
| TOTAL | 1.83 | 1.29 | 1.15 | 2.78 | 6.79 | 17.47 | 15.68 | 2.14 | 1.21 | 0.69 | 1.11 | 7.60 | 8.35 | 2.71 | 1.41 | 0.74 | 72.96 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | | ATMOSPHERIC STABILITY CLASS F | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| UOMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | | ATMOSPHERIC STABILITY CLASS G | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| UOMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

TOTAL HOURS CONSIDERED ARE 2208
 WIND MEASURED AT 140.0 METERS.

OVERALL WIND DIRECTION FREQUENCY

| WIND DIRECTION: | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
|-----------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|------|------|-----|-----|-----|-------|
| FREQUENCY: | 3.0 | 2.2 | 1.9 | 4.1 | 8.3 | 19.8 | 18.1 | 2.6 | 1.4 | 1.0 | 1.5 | 11.9 | 14.6 | 5.5 | 2.3 | 1.8 | 100.0 |

OVERALL WIND SPEED FREQUENCY

| | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|--------|--------|
| MAX WIND SPEED (M/S): | 0.440 | 1.330 | 3.110 | 5.330 | 8.000 | 10.670 | 15.000 |
| AVE WIND SPEED (M/S): | 0.220 | 0.885 | 2.220 | 4.220 | 6.665 | 9.335 | 12.835 |
| WIND SPEED FREQUENCY: | 1.09 | 7.88 | 19.43 | 20.52 | 19.29 | 14.58 | 17.21 |

SUPPRESS OUTPUT OF TERRAIN HEIGHT

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

NO DECAY, UNDEPLETED

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE INKM FROM THE SITE

| DIR | 0.250 | 0.750 | 1.250 | 1.750 | 2.250 | 2.750 | 3.250 | 3.750 | 4.250 | 4.750 | 5.500 | 6.500 |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S | 0.000E+00 | 6.769E-15 | 7.946E-09 | 2.076E-07 | 4.564E-07 | 4.365E-07 | 3.990E-07 | 3.195E-07 | 2.635E-07 | 2.222E-07 | 1.778E-07 | 1.382E-07 |
| SSW | 0.000E+00 | 4.586E-14 | 4.348E-09 | 2.460E-08 | 5.475E-08 | 8.685E-08 | 3.005E-07 | 2.947E-07 | 2.430E-07 | 2.050E-07 | 1.640E-07 | 1.275E-07 |
| SW | 0.000E+00 | 3.372E-14 | 2.261E-09 | 9.364E-09 | 2.917E-08 | 8.633E-08 | 7.882E-08 | 3.291E-08 | 1.069E-08 | 2.813E-09 | 2.937E-08 | 1.236E-07 |
| WSW | 0.000E+00 | 2.822E-18 | 1.880E-11 | 5.439E-10 | 4.664E-09 | 2.500E-08 | 5.070E-08 | 5.752E-08 | 4.022E-08 | 1.919E-08 | 1.241E-07 | 2.286E-07 |
| W | 0.000E+00 | 2.743E-18 | 1.828E-11 | 5.290E-10 | 2.180E-09 | 4.367E-09 | 6.913E-09 | 9.727E-09 | 1.030E-08 | 8.880E-09 | 5.830E-09 | 4.863E-09 |
| WNW | 0.000E+00 | 5.346E-25 | 1.793E-15 | 1.595E-12 | 3.638E-11 | 2.046E-10 | 5.922E-10 | 1.196E-09 | 1.953E-09 | 2.790E-09 | 4.077E-09 | 5.693E-09 |
| NW | 0.000E+00 | 5.033E-25 | 1.688E-15 | 1.502E-12 | 3.425E-11 | 1.927E-10 | 5.580E-10 | 1.129E-09 | 1.847E-09 | 2.648E-09 | 3.897E-09 | 5.505E-09 |
| NNW | 0.000E+00 | 1.676E-25 | 5.623E-16 | 5.003E-13 | 1.141E-11 | 6.420E-11 | 1.860E-10 | 3.766E-10 | 6.177E-10 | 8.880E-10 | 1.313E-09 | 1.872E-09 |
| N | 0.000E+00 | 6.738E-26 | 2.260E-16 | 2.011E-13 | 4.586E-12 | 2.585E-11 | 7.534E-11 | 1.544E-10 | 2.581E-10 | 3.810E-10 | 5.924E-10 | 9.115E-10 |
| NNE | 0.000E+00 | 1.802E-25 | 6.043E-16 | 5.376E-13 | 1.226E-11 | 6.896E-11 | 1.995E-10 | 4.026E-10 | 6.566E-10 | 9.366E-10 | 1.364E-09 | 1.895E-09 |
| NE | 0.000E+00 | 1.582E-25 | 5.307E-16 | 4.722E-13 | 1.077E-11 | 6.059E-11 | 1.755E-10 | 3.549E-10 | 5.812E-10 | 8.337E-10 | 1.228E-09 | 1.738E-09 |
| ENE | 0.000E+00 | 6.514E-25 | 2.185E-15 | 1.944E-12 | 4.432E-11 | 2.492E-10 | 7.204E-10 | 1.451E-09 | 2.359E-09 | 3.349E-09 | 4.832E-09 | 6.605E-09 |
| E | 0.000E+00 | 6.282E-25 | 2.107E-15 | 1.875E-12 | 4.274E-11 | 2.404E-10 | 6.947E-10 | 1.399E-09 | 2.275E-09 | 3.231E-09 | 4.663E-09 | 6.376E-09 |
| ESE | 0.000E+00 | 4.359E-25 | 1.462E-15 | 1.301E-12 | 2.966E-11 | 1.668E-10 | 4.819E-10 | 9.701E-10 | 1.576E-09 | 2.234E-09 | 3.215E-09 | 4.373E-09 |
| SE | 0.000E+00 | 2.556E-15 | 1.979E-09 | 4.388E-08 | 1.256E-07 | 1.376E-07 | 2.733E-07 | 4.547E-07 | 3.881E-07 | 3.280E-07 | 1.186E-07 | 4.517E-07 |
| SSE | 0.000E+00 | 6.415E-15 | 2.256E-09 | 2.404E-08 | 9.002E-08 | 2.161E-07 | 3.649E-07 | 2.922E-07 | 2.409E-07 | 2.032E-07 | 1.626E-07 | 1.263E-07 |

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE INKM FROM THE SITE

| DIR | 7.500 | 8.500 | 9.500 | 12.500 | 17.500 | 22.500 | 27.500 | 32.500 | 37.500 | 42.500 | 47.500 |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S | 1.116E-07 | 9.257E-08 | 7.850E-08 | 5.216E-08 | 3.197E-08 | 2.224E-08 | 1.667E-08 | 1.313E-08 | 1.071E-08 | 8.962E-09 | 7.654E-09 |
| SSW | 1.028E-07 | 8.534E-08 | 7.236E-08 | 4.829E-08 | 2.955E-08 | 2.054E-08 | 1.539E-08 | 1.211E-08 | 9.875E-09 | 8.263E-09 | 7.055E-09 |
| SW | 9.984E-08 | 8.294E-08 | 7.040E-08 | 4.711E-08 | 2.893E-08 | 2.016E-08 | 1.514E-08 | 1.194E-08 | 9.746E-09 | 8.166E-09 | 6.981E-09 |
| WSW | 1.278E-07 | 6.202E-08 | 2.308E-08 | 1.925E-08 | 1.764E-08 | 1.559E-08 | 1.373E-08 | 1.215E-08 | 1.083E-08 | 9.731E-09 | 8.802E-09 |
| W | 5.978E-09 | 6.882E-09 | 7.606E-09 | 8.982E-09 | 9.755E-09 | 9.671E-09 | 9.254E-09 | 8.724E-09 | 8.173E-09 | 7.642E-09 | 7.148E-09 |
| WNW | 7.117E-09 | 8.339E-09 | 9.375E-09 | 1.158E-08 | 1.323E-08 | 1.354E-08 | 1.322E-08 | 1.264E-08 | 1.197E-08 | 1.128E-08 | 1.062E-08 |
| NW | 6.971E-09 | 8.273E-09 | 9.415E-09 | 1.199E-08 | 1.415E-08 | 1.474E-08 | 1.456E-08 | 1.403E-08 | 1.336E-08 | 1.265E-08 | 1.194E-08 |
| NNW | 2.393E-09 | 2.866E-09 | 3.291E-09 | 4.278E-09 | 5.154E-09 | 5.432E-09 | 5.404E-09 | 5.233E-09 | 4.999E-09 | 4.743E-09 | 4.488E-09 |
| N | 1.258E-09 | 1.615E-09 | 1.968E-09 | 2.909E-09 | 3.920E-09 | 4.367E-09 | 4.488E-09 | 4.437E-09 | 4.300E-09 | 4.125E-09 | 3.935E-09 |
| NNE | 2.354E-09 | 2.740E-09 | 3.062E-09 | 3.722E-09 | 4.181E-09 | 4.232E-09 | 4.106E-09 | 3.908E-09 | 3.687E-09 | 3.467E-09 | 3.256E-09 |
| NE | 2.204E-09 | 2.621E-09 | 2.988E-09 | 3.820E-09 | 4.527E-09 | 4.728E-09 | 4.678E-09 | 4.513E-09 | 4.299E-09 | 4.072E-09 | 3.847E-09 |
| ENE | 8.055E-09 | 9.196E-09 | 1.008E-08 | 1.163E-08 | 1.227E-08 | 1.194E-08 | 1.128E-08 | 1.054E-08 | 9.805E-09 | 9.120E-09 | 8.493E-09 |
| E | 7.779E-09 | 8.886E-09 | 9.743E-09 | 1.126E-08 | 1.191E-08 | 1.160E-08 | 1.097E-08 | 1.025E-08 | 9.545E-09 | 8.881E-09 | 8.274E-09 |
| ESE | 5.303E-09 | 6.017E-09 | 6.553E-09 | 7.428E-09 | 7.665E-09 | 7.344E-09 | 6.864E-09 | 6.361E-09 | 5.884E-09 | 5.447E-09 | 5.053E-09 |
| SE | 3.069E-09 | 3.549E-09 | 3.940E-09 | 4.709E-09 | 5.187E-09 | 5.188E-09 | 4.994E-09 | 4.727E-09 | 4.442E-09 | 4.164E-09 | 3.902E-09 |
| SSE | 2.245E-08 | 1.079E-08 | 3.339E-08 | 3.307E-08 | 2.212E-08 | 1.618E-08 | 1.253E-08 | 1.009E-08 | 8.375E-09 | 7.105E-09 | 6.134E-09 |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|--------|--|--------|
| RELEASE HEIGHT (METERS) | 234.00 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL ELEVATED RELEASES.

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

NO DECAY, UNDEPLETED

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

2.260 DAY DECAY, UNDEPLETED

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE INKM FROM THE SITE

| DIR | 0.250 | 0.750 | 1.250 | 1.750 | 2.250 | 2.750 | 3.250 | 3.750 | 4.250 | 4.750 | 5.500 | 6.500 |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S | 0.000E+00 | 6.708E-15 | 7.827E-09 | 2.027E-07 | 4.417E-07 | 4.192E-07 | 3.804E-07 | 3.024E-07 | 2.476E-07 | 2.074E-07 | 1.643E-07 | 1.260E-07 |
| SSW | 0.000E+00 | 4.543E-14 | 4.280E-09 | 2.405E-08 | 5.310E-08 | 8.350E-08 | 2.854E-07 | 2.777E-07 | 2.272E-07 | 1.902E-07 | 1.505E-07 | 1.152E-07 |
| SW | 0.000E+00 | 3.350E-14 | 2.237E-09 | 9.215E-09 | 2.850E-08 | 8.340E-08 | 7.562E-08 | 3.152E-08 | 1.025E-08 | 2.697E-09 | 2.749E-08 | 1.125E-07 |
| WSW | 0.000E+00 | 2.797E-18 | 1.853E-11 | 5.329E-10 | 4.542E-09 | 2.413E-08 | 4.847E-08 | 5.453E-08 | 3.792E-08 | 1.805E-08 | 1.137E-07 | 2.053E-07 |
| W | 0.000E+00 | 2.723E-18 | 1.805E-11 | 5.200E-10 | 2.132E-09 | 4.250E-09 | 6.695E-09 | 9.373E-09 | 9.881E-09 | 8.474E-09 | 5.525E-09 | 4.566E-09 |
| WNW | 0.000E+00 | 5.314E-25 | 1.775E-15 | 1.573E-12 | 3.573E-11 | 2.002E-10 | 5.772E-10 | 1.161E-09 | 1.889E-09 | 2.689E-09 | 3.907E-09 | 5.419E-09 |
| NW | 0.000E+00 | 5.005E-25 | 1.673E-15 | 1.483E-12 | 3.369E-11 | 1.889E-10 | 5.451E-10 | 1.098E-09 | 1.792E-09 | 2.559E-09 | 3.745E-09 | 5.251E-09 |
| NNW | 0.000E+00 | 1.662E-25 | 5.543E-16 | 4.904E-13 | 1.112E-11 | 6.222E-11 | 1.793E-10 | 3.609E-10 | 5.882E-10 | 8.403E-10 | 1.230E-09 | 1.728E-09 |
| N | 0.000E+00 | 6.687E-26 | 2.232E-16 | 1.976E-13 | 4.484E-12 | 2.515E-11 | 7.289E-11 | 1.484E-10 | 2.464E-10 | 3.607E-10 | 5.527E-10 | 8.311E-10 |
| NNE | 0.000E+00 | 1.783E-25 | 5.942E-16 | 5.251E-13 | 1.189E-11 | 6.645E-11 | 1.910E-10 | 3.827E-10 | 6.198E-10 | 8.775E-10 | 1.263E-09 | 1.724E-09 |
| NE | 0.000E+00 | 1.568E-25 | 5.229E-16 | 4.625E-13 | 1.049E-11 | 5.866E-11 | 1.689E-10 | 3.395E-10 | 5.524E-10 | 7.869E-10 | 1.146E-09 | 1.595E-09 |
| ENE | 0.000E+00 | 6.489E-25 | 2.171E-15 | 1.926E-12 | 4.381E-11 | 2.457E-10 | 7.083E-10 | 1.423E-09 | 2.307E-09 | 3.267E-09 | 4.693E-09 | 6.376E-09 |
| E | 0.000E+00 | 6.274E-25 | 2.102E-15 | 1.869E-12 | 4.258E-11 | 2.392E-10 | 6.908E-10 | 1.390E-09 | 2.258E-09 | 3.203E-09 | 4.613E-09 | 6.290E-09 |
| ESE | 0.000E+00 | 4.344E-25 | 1.454E-15 | 1.290E-12 | 2.936E-11 | 1.647E-10 | 4.748E-10 | 9.535E-10 | 1.545E-09 | 2.185E-09 | 3.131E-09 | 4.233E-09 |
| SE | 0.000E+00 | 2.535E-15 | 1.952E-09 | 4.277E-08 | 1.207E-07 | 1.308E-07 | 2.563E-07 | 4.212E-07 | 3.559E-07 | 2.979E-07 | 1.067E-07 | 4.169E-07 |
| SSE | 0.000E+00 | 6.362E-15 | 2.224E-09 | 2.356E-08 | 8.736E-08 | 2.074E-07 | 3.464E-07 | 2.752E-07 | 2.251E-07 | 1.884E-07 | 1.490E-07 | 1.141E-07 |

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

DISTANCE INKM FROM THE SITE

| DIR | 7.500 | 8.500 | 9.500 | 12.500 | 17.500 | 22.500 | 27.500 | 32.500 | 37.500 | 42.500 | 47.500 |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S | 1.003E-07 | 8.216E-08 | 6.878E-08 | 4.405E-08 | 2.549E-08 | 1.683E-08 | 1.202E-08 | 9.048E-09 | 7.075E-09 | 5.692E-09 | 4.683E-09 |
| SSW | 9.164E-08 | 7.496E-08 | 6.267E-08 | 4.016E-08 | 2.308E-08 | 1.513E-08 | 1.074E-08 | 8.043E-09 | 6.254E-09 | 5.006E-09 | 4.097E-09 |
| SW | 8.964E-08 | 7.349E-08 | 6.156E-08 | 3.966E-08 | 2.296E-08 | 1.516E-08 | 1.082E-08 | 8.140E-09 | 6.357E-09 | 5.106E-09 | 4.192E-09 |
| WSW | 1.134E-07 | 5.447E-08 | 2.021E-08 | 1.619E-08 | 1.385E-08 | 1.149E-08 | 9.550E-09 | 8.007E-09 | 6.785E-09 | 5.810E-09 | 5.023E-09 |
| W | 5.559E-09 | 6.340E-09 | 6.941E-09 | 7.974E-09 | 8.295E-09 | 7.904E-09 | 7.293E-09 | 6.645E-09 | 6.031E-09 | 5.472E-09 | 4.974E-09 |
| WNW | 6.730E-09 | 7.836E-09 | 8.755E-09 | 1.063E-08 | 1.184E-08 | 1.183E-08 | 1.130E-08 | 1.059E-08 | 9.835E-09 | 9.102E-09 | 8.417E-09 |
| NW | 6.598E-09 | 7.770E-09 | 8.775E-09 | 1.092E-08 | 1.245E-08 | 1.256E-08 | 1.206E-08 | 1.131E-08 | 1.049E-08 | 9.697E-09 | 8.949E-09 |
| NNW | 2.174E-09 | 2.563E-09 | 2.894E-09 | 3.580E-09 | 3.991E-09 | 3.920E-09 | 3.657E-09 | 3.336E-09 | 3.015E-09 | 2.716E-09 | 2.447E-09 |
| N | 1.118E-09 | 1.400E-09 | 1.663E-09 | 2.287E-09 | 2.763E-09 | 2.794E-09 | 2.628E-09 | 2.393E-09 | 2.149E-09 | 1.918E-09 | 1.708E-09 |
| NNE | 2.102E-09 | 2.399E-09 | 2.625E-09 | 2.992E-09 | 3.019E-09 | 2.763E-09 | 2.439E-09 | 2.125E-09 | 1.845E-09 | 1.603E-09 | 1.397E-09 |
| NE | 1.986E-09 | 2.316E-09 | 2.587E-09 | 3.110E-09 | 3.338E-09 | 3.182E-09 | 2.895E-09 | 2.583E-09 | 2.287E-09 | 2.022E-09 | 1.790E-09 |
| ENE | 7.727E-09 | 8.763E-09 | 9.536E-09 | 1.077E-08 | 1.097E-08 | 1.031E-08 | 9.436E-09 | 8.553E-09 | 7.736E-09 | 7.003E-09 | 6.356E-09 |
| E | 7.649E-09 | 8.704E-09 | 9.504E-09 | 1.083E-08 | 1.118E-08 | 1.063E-08 | 9.811E-09 | 8.962E-09 | 8.160E-09 | 7.431E-09 | 6.779E-09 |
| ESE | 5.099E-09 | 5.743E-09 | 6.206E-09 | 6.859E-09 | 6.770E-09 | 6.209E-09 | 5.567E-09 | 4.960E-09 | 4.420E-09 | 3.949E-09 | 3.541E-09 |
| SE | 2.810E-09 | 3.201E-09 | 3.497E-09 | 3.978E-09 | 4.037E-09 | 3.738E-09 | 3.350E-09 | 2.966E-09 | 2.619E-09 | 2.314E-09 | 2.051E-09 |
| SSE | 2.034E-08 | 9.736E-09 | 2.918E-08 | 2.760E-08 | 1.731E-08 | 1.191E-08 | 8.720E-09 | 6.663E-09 | 5.257E-09 | 4.251E-09 | 3.506E-09 |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|--------|--|--------|
| RELEASE HEIGHT (METERS) | 234.00 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL ELEVATED RELEASES.

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

2.260 DAY DECAY, UNDEPLETED

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
8.000 DAY DECAY, DEPLETED

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIR | 0.250 | 0.750 | 1.250 | 1.750 | 2.250 | 2.750 | 3.250 | 3.750 | 4.250 | 4.750 | 5.500 | 6.500 | |
| S | 0.000E+00 | 6.751E-15 | 7.912E-09 | 2.057E-07 | 4.492E-07 | 4.270E-07 | 3.870E-07 | 3.057E-07 | 2.488E-07 | 2.074E-07 | 1.631E-07 | 1.242E-07 | |
| SSW | 0.000E+00 | 4.574E-14 | 4.328E-09 | 2.441E-08 | 5.396E-08 | 8.511E-08 | 2.937E-07 | 2.847E-07 | 2.317E-07 | 1.931E-07 | 1.519E-07 | 1.155E-07 | |
| SW | 0.000E+00 | 3.366E-14 | 2.254E-09 | 9.306E-09 | 2.881E-08 | 8.485E-08 | 7.710E-08 | 3.196E-08 | 1.028E-08 | 2.678E-09 | 2.806E-08 | 1.175E-07 | |
| WSW | 0.000E+00 | 2.815E-18 | 1.872E-11 | 5.398E-10 | 4.595E-09 | 2.447E-08 | 4.937E-08 | 5.573E-08 | 3.870E-08 | 1.829E-08 | 1.189E-07 | 2.185E-07 | |
| W | 0.000E+00 | 2.737E-18 | 1.821E-11 | 5.255E-10 | 2.150E-09 | 4.276E-09 | 6.723E-09 | 9.402E-09 | 9.898E-09 | 8.471E-09 | 5.498E-09 | 4.526E-09 | |
| WNW | 0.000E+00 | 5.337E-25 | 1.788E-15 | 1.586E-12 | 3.593E-11 | 2.006E-10 | 5.763E-10 | 1.155E-09 | 1.874E-09 | 2.660E-09 | 3.853E-09 | 5.330E-09 | |
| NW | 0.000E+00 | 5.025E-25 | 1.684E-15 | 1.494E-12 | 3.384E-11 | 1.890E-10 | 5.434E-10 | 1.091E-09 | 1.774E-09 | 2.528E-09 | 3.688E-09 | 5.164E-09 | |
| NNW | 0.000E+00 | 1.672E-25 | 5.600E-16 | 4.966E-13 | 1.124E-11 | 6.277E-11 | 1.804E-10 | 3.625E-10 | 5.902E-10 | 8.425E-10 | 1.235E-09 | 1.741E-09 | |
| N | 0.000E+00 | 6.723E-26 | 2.252E-16 | 1.997E-13 | 4.523E-12 | 2.530E-11 | 7.317E-11 | 1.488E-10 | 2.471E-10 | 3.623E-10 | 5.587E-10 | 8.516E-10 | |
| NNE | 0.000E+00 | 1.797E-25 | 6.014E-16 | 5.331E-13 | 1.206E-11 | 6.731E-11 | 1.931E-10 | 3.866E-10 | 6.255E-10 | 8.855E-10 | 1.276E-09 | 1.749E-09 | |
| NE | 0.000E+00 | 1.578E-25 | 5.285E-16 | 4.686E-13 | 1.061E-11 | 5.921E-11 | 1.701E-10 | 3.415E-10 | 5.549E-10 | 7.903E-10 | 1.152E-09 | 1.612E-09 | |
| ENE | 0.000E+00 | 6.507E-25 | 2.181E-15 | 1.935E-12 | 4.385E-11 | 2.449E-10 | 7.027E-10 | 1.406E-09 | 2.270E-09 | 3.202E-09 | 4.579E-09 | 6.192E-09 | |
| E | 0.000E+00 | 6.280E-25 | 2.106E-15 | 1.870E-12 | 4.238E-11 | 2.368E-10 | 6.799E-10 | 1.361E-09 | 2.198E-09 | 3.103E-09 | 4.442E-09 | 6.016E-09 | |
| ESE | 0.000E+00 | 4.355E-25 | 1.460E-15 | 1.296E-12 | 2.936E-11 | 1.639E-10 | 4.704E-10 | 9.404E-10 | 1.517E-09 | 2.138E-09 | 3.048E-09 | 4.101E-09 | |
| SE | 0.000E+00 | 2.550E-15 | 1.971E-09 | 4.351E-08 | 1.238E-07 | 1.350E-07 | 2.670E-07 | 4.425E-07 | 3.727E-07 | 3.110E-07 | 1.136E-07 | 4.207E-07 | |
| SSE | 0.000E+00 | 6.400E-15 | 2.247E-09 | 2.386E-08 | 8.878E-08 | 2.119E-07 | 3.557E-07 | 2.808E-07 | 2.285E-07 | 1.904E-07 | 1.497E-07 | 1.139E-07 | |

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| DIR | 7.500 | 8.500 | 9.500 | 12.500 | 17.500 | 22.500 | 27.500 | 32.500 | 37.500 | 42.500 | 47.500 | | |
| S | 9.827E-08 | 8.007E-08 | 6.674E-08 | 4.249E-08 | 2.436E-08 | 1.600E-08 | 1.138E-08 | 8.546E-09 | 6.666E-09 | 5.351E-09 | 4.392E-09 | | |
| SSW | 9.141E-08 | 7.446E-08 | 6.204E-08 | 3.963E-08 | 2.266E-08 | 1.485E-08 | 1.054E-08 | 7.901E-09 | 6.152E-09 | 4.929E-09 | 4.040E-09 | | |
| SW | 9.315E-08 | 7.604E-08 | 6.348E-08 | 4.076E-08 | 2.348E-08 | 1.547E-08 | 1.105E-08 | 8.317E-09 | 6.503E-09 | 5.232E-09 | 4.304E-09 | | |
| WSW | 1.211E-07 | 5.798E-08 | 2.113E-08 | 1.726E-08 | 1.540E-08 | 1.328E-08 | 1.142E-08 | 9.876E-09 | 8.610E-09 | 7.568E-09 | 6.704E-09 | | |
| W | 5.511E-09 | 6.295E-09 | 6.910E-09 | 8.048E-09 | 8.599E-09 | 8.412E-09 | 7.950E-09 | 7.404E-09 | 6.854E-09 | 6.334E-09 | 5.856E-09 | | |
| WNW | 6.614E-09 | 7.706E-09 | 8.626E-09 | 1.058E-08 | 1.201E-08 | 1.222E-08 | 1.186E-08 | 1.127E-08 | 1.061E-08 | 9.934E-09 | 9.290E-09 | | |
| NW | 6.494E-09 | 7.667E-09 | 8.690E-09 | 1.099E-08 | 1.286E-08 | 1.328E-08 | 1.301E-08 | 1.243E-08 | 1.172E-08 | 1.100E-08 | 1.029E-08 | | |
| NNW | 2.206E-09 | 2.623E-09 | 2.992E-09 | 3.833E-09 | 4.516E-09 | 4.654E-09 | 4.527E-09 | 4.287E-09 | 4.006E-09 | 3.720E-09 | 3.446E-09 | | |
| N | 1.166E-09 | 1.487E-09 | 1.800E-09 | 2.614E-09 | 3.413E-09 | 3.683E-09 | 3.667E-09 | 3.514E-09 | 3.304E-09 | 3.075E-09 | 2.849E-09 | | |
| NNE | 2.148E-09 | 2.475E-09 | 2.739E-09 | 3.252E-09 | 3.524E-09 | 3.449E-09 | 3.236E-09 | 2.981E-09 | 2.723E-09 | 2.480E-09 | 2.257E-09 | | |
| NE | 2.024E-09 | 2.385E-09 | 2.698E-09 | 3.382E-09 | 3.889E-09 | 3.943E-09 | 3.788E-09 | 3.549E-09 | 3.286E-09 | 3.025E-09 | 2.780E-09 | | |
| ENE | 7.483E-09 | 8.475E-09 | 9.224E-09 | 1.049E-08 | 1.089E-08 | 1.046E-08 | 9.769E-09 | 9.022E-09 | 8.303E-09 | 7.640E-09 | 7.040E-09 | | |
| E | 7.280E-09 | 8.259E-09 | 9.002E-09 | 1.029E-08 | 1.074E-08 | 1.037E-08 | 9.732E-09 | 9.027E-09 | 8.340E-09 | 7.702E-09 | 7.121E-09 | | |
| ESE | 4.924E-09 | 5.539E-09 | 5.986E-09 | 6.669E-09 | 6.731E-09 | 6.332E-09 | 5.819E-09 | 5.307E-09 | 4.832E-09 | 4.406E-09 | 4.027E-09 | | |
| SE | 2.818E-09 | 3.228E-09 | 3.553E-09 | 4.161E-09 | 4.452E-09 | 4.335E-09 | 4.066E-09 | 3.751E-09 | 3.438E-09 | 3.144E-09 | 2.876E-09 | | |
| SSE | 2.085E-08 | 9.844E-09 | 3.077E-08 | 3.001E-08 | 1.947E-08 | 1.384E-08 | 1.043E-08 | 8.195E-09 | 6.635E-09 | 5.498E-09 | 4.640E-09 | | |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|--------|--|--------|
| RELEASE HEIGHT (METERS) | 234.00 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL ELEVATED RELEASES.
OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
8.000 DAY DECAY, DEPLETED
OXOQDOQ - TPC NPP # 1

(2) 核一廠 110 年第 3 季低塔氣象報表

1*** METEOROLOGICAL MONTHLY CALCULATION DATA REPORT ***
DATE FROM <2021-07-01-00> TO <2021-09-30-23>
0 SELECTED DAILY MET. DATA RECORDS NUMBER MUST = 2208.
THE NUMBER OF RECORDS IN THE SELECTED INTERVAL = 2208
THE DATA COLLECTING RATE= 100.00 %

0
0 METEOROLOGICAL SIGNAL TABLE :
DESCRIPTION OG-LO(86M) OG-HI(140M) LOW-LO(10M) LOW-HI(33M)
TEMP (1- 6) 1 2 5 6
W/S GP(7-12) 7 8 11 12
W/S LT(13-18) 13 14 17 18
W/D GP(19-24) 19 20 23 24
W/D LT(25-30) 25 26 29 30

0
THE SELECTED WIND SPEED SENSOR IS [18]
THE SELECTED WIND DIRECTION SENSOR IS [30]

0
JFDT TABLE FOR GROUND RELEASE
***TOTAL NO OF OBSERVATION= 2208.000 ***

1

ACCUMULATIVE FREQUENCY DISTRIBUTION'S
OF WIND SPEED CATEGORIES AND WIND DIRECTION SECTORS
BY ATMOSPHERIC STABILITY CATEGORIES

FREQUENCY OF CALM = 31.386
STABILITY: A B C D E F G
CALM 3.804 0.091 0.272 0.951 14.810 9.692 1.766

1

STABILITY-A (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.23 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.54 |
| NNE | 0.27 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 |
| NE | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| ENE | 0.18 | 0.14 | 0.09 | 0.00 | 0.00 | 0.00 | 0.41 |
| E | 0.36 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 |
| ESE | 0.18 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| SE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| SSE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| S | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SSW | 0.41 | 0.09 | 0.23 | 0.00 | 0.00 | 0.00 | 0.72 |
| SW | 0.95 | 1.49 | 0.82 | 0.00 | 0.00 | 0.00 | 3.26 |
| WSW | 0.68 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.72 |
| W | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 |
| WNW | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| NW | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |
| NNW | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| TOTAL | 4.30 | 2.40 | 1.13 | 0.00 | 0.00 | 0.00 | 7.84 |

1

STABILITY-B (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.05 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.09 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 |
| ENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| E | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSW | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| SW | 0.05 | 0.18 | 0.05 | 0.00 | 0.00 | 0.00 | 0.27 |
| WSW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.18 | 0.18 | 0.09 | 0.09 | 0.00 | 0.00 | 0.54 |

1

STABILITY-C (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ENE | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.05 |
| E | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SSW | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| SW | 0.05 | 0.09 | 0.05 | 0.05 | 0.00 | 0.00 | 0.23 |
| WSW | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.32 | 0.09 | 0.05 | 0.09 | 0.00 | 0.00 | 0.54 |

1

STABILITY-D (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.05 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |
| NNE | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| NE | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 |
| ENE | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 |
| E | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| ESE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| S | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SSW | 0.09 | 0.18 | 0.09 | 0.00 | 0.00 | 0.00 | 0.36 |
| SW | 0.59 | 0.36 | 0.05 | 0.05 | 0.00 | 0.00 | 1.04 |
| WSW | 0.14 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| W | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| WNW | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| NW | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| NNW | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| TOTAL | 1.63 | 0.77 | 0.23 | 0.05 | 0.00 | 0.00 | 2.67 |

1

STABILITY-E (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.23 | 0.86 | 0.09 | 0.14 | 0.00 | 0.00 | 1.31 |
| NNE | 0.09 | 0.18 | 0.05 | 0.09 | 0.00 | 0.00 | 0.41 |
| NE | 0.23 | 0.09 | 0.41 | 0.72 | 0.00 | 0.00 | 1.45 |
| ENE | 0.36 | 0.14 | 0.36 | 0.09 | 0.05 | 0.00 | 1.00 |
| E | 0.23 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| ESE | 0.18 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 |
| SE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| SSE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 1.49 | 0.50 | 0.05 | 0.00 | 0.00 | 0.00 | 2.04 |
| SSW | 5.34 | 2.45 | 0.27 | 0.00 | 0.00 | 0.00 | 8.06 |
| SW | 6.52 | 1.31 | 0.72 | 0.05 | 0.00 | 0.00 | 8.61 |
| WSW | 2.36 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 2.58 |
| W | 0.68 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.72 |
| WNW | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 |
| NW | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| NNW | 0.18 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 |
| TOTAL | 18.34 | 5.93 | 1.95 | 1.09 | 0.05 | 0.00 | 27.36 |

1

STABILITY-F (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.18 | 0.86 | 0.14 | 0.23 | 0.00 | 0.05 | 1.45 |
| NNE | 0.45 | 0.63 | 0.14 | 0.18 | 0.00 | 0.09 | 1.49 |
| NE | 0.27 | 0.18 | 0.18 | 0.68 | 0.05 | 0.05 | 1.40 |
| ENE | 0.54 | 0.14 | 0.05 | 0.05 | 0.05 | 0.05 | 0.86 |
| E | 0.32 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 |
| ESE | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| SSE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| S | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 |
| SSW | 2.85 | 1.49 | 0.18 | 0.05 | 0.00 | 0.00 | 4.57 |
| SW | 6.57 | 1.77 | 0.59 | 0.32 | 0.00 | 0.00 | 9.24 |
| WSW | 2.08 | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 2.76 |
| W | 0.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.14 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| NNW | 0.05 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| TOTAL | 14.36 | 6.16 | 1.27 | 1.49 | 0.09 | 0.23 | 23.60 |

1

STABILITY-G (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.05 | 0.45 | 0.14 | 0.00 | 0.00 | 0.00 | 0.63 |
| NNE | 0.14 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| NE | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| ENE | 1.31 | 0.68 | 0.05 | 0.00 | 0.00 | 0.00 | 2.04 |
| E | 0.72 | 0.59 | 0.00 | 0.00 | 0.00 | 0.00 | 1.31 |
| ESE | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SSE | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| S | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 |
| SSW | 0.18 | 0.05 | 0.09 | 0.00 | 0.00 | 0.00 | 0.32 |
| SW | 0.54 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.59 |
| WSW | 0.32 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 |
| W | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WNW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NNW | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| TOTAL | 3.62 | 2.13 | 0.32 | 0.00 | 0.00 | 0.00 | 6.07 |

1

STABILITY-ALL (FREQ)

| WIND DIRECT | WIND SPEED (M/SEC) AT 10M LEVEL | | | | | | |
|----------------|---------------------------------|---------|---------|---------|----------|----------|---------|
| | 0.4-1.3 | 1.3-3.1 | 3.1-5.3 | 5.3-8.0 | 8.0-10.7 | 10.7-100 | 0.4-100 |
| N | 0.77 | 2.58 | 0.41 | 0.36 | 0.00 | 0.05 | 4.17 |
| NNE | 1.04 | 1.09 | 0.18 | 0.27 | 0.00 | 0.09 | 2.67 |
| NE | 0.77 | 0.27 | 0.63 | 1.49 | 0.05 | 0.05 | 3.26 |
| ENE | 2.40 | 1.09 | 0.59 | 0.18 | 0.09 | 0.05 | 4.39 |
| E | 1.72 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 2.63 |
| ESE | 0.45 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 |
| SE | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |
| SSE | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| S | 2.17 | 0.50 | 0.05 | 0.00 | 0.00 | 0.00 | 2.72 |
| SSW | 8.97 | 4.26 | 0.86 | 0.05 | 0.00 | 0.00 | 14.13 |
| SW | 15.26 | 5.21 | 2.31 | 0.45 | 0.00 | 0.00 | 23.23 |
| WSW | 5.66 | 1.13 | 0.00 | 0.00 | 0.00 | 0.00 | 6.79 |
| W | 1.68 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 1.72 |
| WNW | 0.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.72 |
| NW | 0.36 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 |
| NNW | 0.45 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 |
| TOTAL | 42.75 | 17.66 | 5.03 | 2.81 | 0.14 | 0.23 | 68.61 |

1PRINTOUT OF INPUT CARDS

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0 1 11100 00000 01100 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
  2 XOQDOQ - TPC NPP # 1
  3 7 7 10 5 0 1 0
  4 33.00 101.00 2.26 -8.00 0.00
  5 3.804 0.091 0.272 0.951 14.810 9.692 1.766
  7 0. 0.440 1.330 3.110 5.330 8.000 10.670 15.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
 10 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000. 1000.
 11 103. 114. 114. 63. 63. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 100. 103.
 10 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000. 2000.
 11 189. 130. 114. 63. 63. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 152. 133.
 10 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000. 3000.
 11 213. 149. 160. 110. 58. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 152. 189.
 10 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000. 4000.
 11 339. 360. 102. 110. 58. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 244. 390.
 10 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000. 5000.
 11 370. 320. 0. 54. 36. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 262. 345.
 10 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000. 6000.
 11 371. 285. 219. 219. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 48. 322.
 10 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000. 7000.
 11 371. 741. 441. 147. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 182.
 10 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000. 8000.
 11 371. 650. 373. 153. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
 10 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000. 9000.
 11 561. 700. 373. 70. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 100.
 10 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000. 10000.
 11 225. 750. 737. 50. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 150.
 15 EXIT ONE - BUILDING VENT -NO PURGE RELEASE
 16 0.000 0.000 43.5 56.0 1875.0 10.0 0.00
 17 A 0 0 0
     XOQDOQ - TPC NPP # 1

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OJOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION

ATMOSPHERIC STABILITY CLASS A

| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.44 | 0.200 | 0.240 | 0.080 | 0.160 | 0.320 | 0.160 | 0.040 | 0.040 | 0.080 | 0.360 | 0.841 | 0.601 | 0.320 | 0.080 | 0.120 | 0.160 | 3.804 |
| 1.33 | 0.226 | 0.272 | 0.091 | 0.181 | 0.362 | 0.181 | 0.045 | 0.045 | 0.091 | 0.408 | 0.951 | 0.679 | 0.362 | 0.091 | 0.136 | 0.181 | 4.303 |
| 3.11 | 0.317 | 0.136 | 0.000 | 0.136 | 0.091 | 0.091 | 0.000 | 0.000 | 0.000 | 0.091 | 1.495 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 2.400 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.226 | 0.815 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.132 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.74 | 0.65 | 0.17 | 0.57 | 0.77 | 0.43 | 0.09 | 0.09 | 0.17 | 1.09 | 4.10 | 1.33 | 0.68 | 0.17 | 0.26 | 0.34 | 11.64 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS B | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.023 | 0.023 | 0.000 | 0.000 | 0.000 | 0.023 | 0.000 | 0.091 |
| 1.33 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.045 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.181 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.181 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.181 |
| 5.33 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 |
| 8.00 | 0.000 | 0.000 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.11 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.29 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.63 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS C | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.000 | 0.000 | 0.000 | 0.000 | 0.039 | 0.000 | 0.000 | 0.000 | 0.078 | 0.039 | 0.039 | 0.078 | 0.000 | 0.000 | 0.000 | 0.000 | 0.272 |
| 1.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.091 | 0.045 | 0.045 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.317 |
| 3.11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 |
| 5.33 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.05 | 0.08 | 0.00 | 0.00 | 0.00 | 0.17 | 0.08 | 0.27 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.82 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS D | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.026 | 0.053 | 0.000 | 0.000 | 0.026 | 0.000 | 0.000 | 0.026 | 0.053 | 0.053 | 0.343 | 0.079 | 0.106 | 0.159 | 0.000 | 0.026 | 0.951 |
| 1.33 | 0.045 | 0.091 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.045 | 0.091 | 0.091 | 0.589 | 0.136 | 0.181 | 0.272 | 0.000 | 0.045 | 1.630 |
| 3.11 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.181 | 0.362 | 0.045 | 0.000 | 0.000 | 0.091 | 0.000 | 0.770 |
| 5.33 | 0.000 | 0.000 | 0.045 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.226 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.16 | 0.14 | 0.05 | 0.05 | 0.07 | 0.00 | 0.00 | 0.07 | 0.14 | 0.42 | 1.39 | 0.26 | 0.29 | 0.43 | 0.09 | 0.07 | 3.62 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS E | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| OUMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.183 | 0.073 | 0.183 | 0.293 | 0.183 | 0.146 | 0.037 | 0.000 | 1.207 | 4.315 | 5.266 | 1.902 | 0.549 | 0.293 | 0.037 | 0.146 | 14.810 |
| 1.33 | 0.226 | 0.091 | 0.226 | 0.362 | 0.226 | 0.181 | 0.045 | 0.000 | 1.495 | 5.344 | 6.522 | 2.355 | 0.679 | 0.362 | 0.045 | 0.181 | 18.342 |
| 3.11 | 0.861 | 0.181 | 0.091 | 0.136 | 0.045 | 0.045 | 0.000 | 0.000 | 0.498 | 2.446 | 1.313 | 0.226 | 0.045 | 0.000 | 0.000 | 0.045 | 5.933 |
| 5.33 | 0.091 | 0.045 | 0.408 | 0.362 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.272 | 0.725 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.947 |
| 8.00 | 0.136 | 0.091 | 0.725 | 0.091 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.087 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 1.50 | 0.48 | 1.63 | 1.29 | 0.45 | 0.37 | 0.08 | 0.00 | 3.24 | 12.38 | 13.87 | 4.48 | 1.27 | 0.65 | 0.08 | 0.37 | 42.16 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS F | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| UOMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.122 | 0.306 | 0.183 | 0.367 | 0.214 | 0.031 | 0.031 | 0.031 | 0.214 | 1.926 | 4.433 | 1.406 | 0.306 | 0.000 | 0.092 | 0.031 | 9.692 |
| 1.33 | 0.181 | 0.453 | 0.272 | 0.543 | 0.317 | 0.045 | 0.045 | 0.045 | 0.317 | 2.853 | 6.567 | 2.083 | 0.453 | 0.000 | 0.136 | 0.045 | 14.357 |
| 3.11 | 0.861 | 0.634 | 0.181 | 0.136 | 0.181 | 0.045 | 0.000 | 0.000 | 0.000 | 1.495 | 1.766 | 0.679 | 0.000 | 0.000 | 0.045 | 0.136 | 6.159 |
| 5.33 | 0.136 | 0.136 | 0.181 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.181 | 0.589 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.268 |
| 8.00 | 0.226 | 0.181 | 0.679 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.317 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.495 |
| 10.67 | 0.000 | 0.000 | 0.045 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 |
| 15.00 | 0.045 | 0.091 | 0.045 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.226 |
| TOTAL | 1.57 | 1.80 | 1.59 | 1.23 | 0.71 | 0.12 | 0.08 | 0.08 | 0.53 | 6.50 | 13.67 | 4.17 | 0.76 | 0.00 | 0.27 | 0.21 | 33.29 |

| JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION | | | | | | | | | ATMOSPHERIC STABILITY CLASS G | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| UOMAX (M/S) | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
| 0.44 | 0.022 | 0.066 | 0.088 | 0.640 | 0.353 | 0.022 | 0.000 | 0.022 | 0.044 | 0.088 | 0.265 | 0.155 | 0.000 | 0.000 | 0.000 | 0.000 | 1.766 |
| 1.33 | 0.045 | 0.136 | 0.181 | 1.313 | 0.725 | 0.045 | 0.000 | 0.045 | 0.091 | 0.181 | 0.543 | 0.317 | 0.000 | 0.000 | 0.000 | 0.000 | 3.623 |
| 3.11 | 0.453 | 0.136 | 0.000 | 0.679 | 0.589 | 0.045 | 0.000 | 0.000 | 0.000 | 0.045 | 0.000 | 0.136 | 0.000 | 0.000 | 0.000 | 0.045 | 2.129 |
| 5.33 | 0.136 | 0.000 | 0.000 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.091 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.317 |
| 8.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10.67 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TOTAL | 0.66 | 0.34 | 0.27 | 2.68 | 1.67 | 0.11 | 0.00 | 0.07 | 0.13 | 0.41 | 0.85 | 0.61 | 0.00 | 0.00 | 0.00 | 0.05 | 7.84 |

TOTAL HOURS CONSIDERED ARE 2208

OWIND MEASURED AT 33.0 METERS.

OVERALL WIND DIRECTION FREQUENCY

| WIND DIRECTION: | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | TOTAL |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|-----|-----|-------|
| FREQUENCY: | 4.7 | 3.4 | 3.8 | 5.9 | 3.8 | 1.0 | 0.2 | 0.3 | 4.4 | 20.9 | 34.4 | 11.0 | 3.0 | 1.3 | 0.8 | 1.0 | 100.0 |

OVERALL WIND SPEED FREQUENCY

| | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|--------|--------|
| MAX WIND SPEED (M/S): | 0.440 | 1.330 | 3.110 | 5.330 | 8.000 | 10.670 | 15.000 |
| AVE WIND SPEED (M/S): | 0.220 | 0.885 | 2.220 | 4.220 | 6.665 | 9.335 | 12.835 |
| WIND SPEED FREQUENCY: | 31.39 | 42.75 | 17.66 | 5.03 | 2.81 | 0.14 | 0.23 |

SUPPRESS OUTPUT OF TERRAIN HEIGHT

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
 NO DECAY, UNDEPLETED

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIR | 0.250 | 0.750 | 1.250 | 1.750 | 2.250 | 2.750 | 3.250 | 3.750 | 4.250 | 4.750 | 5.500 | 6.500 | |
| S | 5.484E-05 | 7.749E-06 | 3.404E-06 | 2.120E-06 | 1.495E-06 | 1.141E-06 | 9.126E-07 | 7.540E-07 | 6.382E-07 | 5.503E-07 | 4.529E-07 | 3.630E-07 | |
| SSW | 6.672E-05 | 9.285E-06 | 3.895E-06 | 2.452E-06 | 1.744E-06 | 1.341E-06 | 1.079E-06 | 8.963E-07 | 7.618E-07 | 6.594E-07 | 5.452E-07 | 4.391E-07 | |
| SW | 5.809E-05 | 8.296E-06 | 3.603E-06 | 2.241E-06 | 1.580E-06 | 1.210E-06 | 9.727E-07 | 8.065E-07 | 6.847E-07 | 5.920E-07 | 4.888E-07 | 3.932E-07 | |
| WSW | 2.009E-04 | 2.818E-05 | 1.162E-05 | 6.970E-06 | 4.829E-06 | 3.728E-06 | 3.030E-06 | 2.537E-06 | 2.172E-06 | 1.892E-06 | 1.577E-06 | 1.282E-06 | |
| W | 1.211E-04 | 1.680E-05 | 6.903E-06 | 4.137E-06 | 2.866E-06 | 2.210E-06 | 1.794E-06 | 1.501E-06 | 1.284E-06 | 1.117E-06 | 9.308E-07 | 7.561E-07 | |
| WNW | 2.101E-05 | 2.898E-06 | 1.303E-06 | 8.018E-07 | 5.621E-07 | 4.278E-07 | 3.417E-07 | 2.819E-07 | 2.384E-07 | 2.054E-07 | 1.689E-07 | 1.352E-07 | |
| NW | 6.402E-06 | 8.928E-07 | 3.995E-07 | 2.540E-07 | 1.811E-07 | 1.381E-07 | 1.102E-07 | 9.076E-08 | 7.663E-08 | 6.594E-08 | 5.411E-08 | 4.321E-08 | |
| NNW | 9.334E-06 | 1.302E-06 | 5.339E-07 | 3.249E-07 | 2.269E-07 | 1.744E-07 | 1.408E-07 | 1.173E-07 | 9.991E-08 | 8.667E-08 | 7.188E-08 | 5.810E-08 | |
| N | 1.204E-04 | 1.820E-05 | 8.697E-06 | 5.413E-06 | 3.794E-06 | 2.863E-06 | 2.266E-06 | 1.855E-06 | 1.558E-06 | 1.334E-06 | 1.088E-06 | 8.631E-07 | |
| NNE | 5.554E-04 | 8.239E-05 | 3.839E-05 | 2.422E-05 | 1.713E-05 | 1.300E-05 | 1.033E-05 | 8.487E-06 | 7.147E-06 | 6.136E-06 | 5.019E-06 | 3.995E-06 | |
| NE | 9.525E-04 | 1.392E-04 | 6.282E-05 | 3.982E-05 | 2.828E-05 | 2.155E-05 | 1.718E-05 | 1.416E-05 | 1.195E-05 | 1.028E-05 | 8.436E-06 | 6.735E-06 | |
| ENE | 3.352E-04 | 4.863E-05 | 2.188E-05 | 1.380E-05 | 9.775E-06 | 7.447E-06 | 5.943E-06 | 4.898E-06 | 4.137E-06 | 3.561E-06 | 2.923E-06 | 2.336E-06 | |
| E | 7.943E-05 | 1.153E-05 | 5.299E-06 | 3.344E-06 | 2.368E-06 | 1.796E-06 | 1.427E-06 | 1.171E-06 | 9.857E-07 | 8.459E-07 | 6.916E-07 | 5.501E-07 | |
| ESE | 2.682E-05 | 4.196E-06 | 2.060E-06 | 1.267E-06 | 8.795E-07 | 6.567E-07 | 5.150E-07 | 4.182E-07 | 3.487E-07 | 2.967E-07 | 2.400E-07 | 1.885E-07 | |
| SE | 1.545E-05 | 2.088E-06 | 8.837E-07 | 5.635E-07 | 4.035E-07 | 3.088E-07 | 2.470E-07 | 2.041E-07 | 1.727E-07 | 1.489E-07 | 1.225E-07 | 9.813E-08 | |
| SSE | 1.835E-05 | 2.580E-06 | 1.194E-06 | 7.442E-07 | 5.242E-07 | 3.965E-07 | 3.144E-07 | 2.578E-07 | 2.167E-07 | 1.858E-07 | 1.518E-07 | 1.206E-07 | |

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| DIR | 7.500 | 8.500 | 9.500 | 12.500 | 17.500 | 22.500 | 27.500 | 32.500 | 37.500 | 42.500 | 47.500 | | |
| S | 3.004E-07 | 2.547E-07 | 2.201E-07 | 1.537E-07 | 9.923E-08 | 7.172E-08 | 5.540E-08 | 4.473E-08 | 3.726E-08 | 3.177E-08 | 2.759E-08 | | |
| SSW | 3.649E-07 | 3.105E-07 | 2.690E-07 | 1.891E-07 | 1.230E-07 | 8.937E-08 | 6.933E-08 | 5.616E-08 | 4.691E-08 | 4.010E-08 | 3.489E-08 | | |
| SW | 3.264E-07 | 2.774E-07 | 2.402E-07 | 1.685E-07 | 1.094E-07 | 7.940E-08 | 6.153E-08 | 4.980E-08 | 4.157E-08 | 3.551E-08 | 3.088E-08 | | |
| WSW | 1.074E-06 | 9.198E-07 | 8.018E-07 | 5.719E-07 | 3.786E-07 | 2.786E-07 | 2.183E-07 | 1.783E-07 | 1.500E-07 | 1.290E-07 | 1.128E-07 | | |
| W | 6.329E-07 | 5.419E-07 | 4.722E-07 | 3.365E-07 | 2.226E-07 | 1.637E-07 | 1.283E-07 | 1.048E-07 | 8.814E-08 | 7.580E-08 | 6.631E-08 | | |
| WNW | 1.118E-07 | 9.471E-08 | 8.177E-08 | 5.701E-08 | 3.675E-08 | 2.653E-08 | 2.049E-08 | 1.653E-08 | 1.377E-08 | 1.174E-08 | 1.019E-08 | | |
| NW | 3.565E-08 | 3.015E-08 | 2.598E-08 | 1.802E-08 | 1.154E-08 | 8.289E-09 | 6.372E-09 | 5.123E-09 | 4.252E-09 | 3.614E-09 | 3.129E-09 | | |
| NNW | 4.843E-08 | 4.132E-08 | 3.589E-08 | 2.539E-08 | 1.665E-08 | 1.217E-08 | 9.488E-09 | 7.719E-09 | 6.471E-09 | 5.550E-09 | 4.843E-09 | | |
| N | 7.082E-07 | 5.959E-07 | 5.113E-07 | 3.511E-07 | 2.221E-07 | 1.581E-07 | 1.208E-07 | 9.656E-08 | 7.978E-08 | 6.754E-08 | 5.826E-08 | | |
| NNE | 3.287E-06 | 2.772E-06 | 2.384E-06 | 1.645E-06 | 1.046E-06 | 7.478E-07 | 5.726E-07 | 4.588E-07 | 3.797E-07 | 3.219E-07 | 2.781E-07 | | |
| NE | 5.556E-06 | 4.697E-06 | 4.047E-06 | 2.806E-06 | 1.796E-06 | 1.289E-06 | 9.902E-07 | 7.957E-07 | 6.602E-07 | 5.609E-07 | 4.854E-07 | | |
| ENE | 1.928E-06 | 1.631E-06 | 1.406E-06 | 9.761E-07 | 6.257E-07 | 4.498E-07 | 3.460E-07 | 2.783E-07 | 2.312E-07 | 1.966E-07 | 1.702E-07 | | |
| E | 4.524E-07 | 3.814E-07 | 3.279E-07 | 2.260E-07 | 1.437E-07 | 1.026E-07 | 7.854E-08 | 6.292E-08 | 5.206E-08 | 4.413E-08 | 3.811E-08 | | |
| ESE | 1.534E-07 | 1.282E-07 | 1.093E-07 | 7.387E-08 | 4.583E-08 | 3.216E-08 | 2.426E-08 | 1.921E-08 | 1.573E-08 | 1.322E-08 | 1.133E-08 | | |
| SE | 8.118E-08 | 6.886E-08 | 5.951E-08 | 4.157E-08 | 2.684E-08 | 1.940E-08 | 1.498E-08 | 1.209E-08 | 1.007E-08 | 8.587E-09 | 7.455E-09 | | |
| SSE | 9.910E-08 | 8.351E-08 | 7.175E-08 | 4.941E-08 | 3.138E-08 | 2.241E-08 | 1.715E-08 | 1.374E-08 | 1.137E-08 | 9.643E-09 | 8.331E-09 | | |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|-------|--|--------|
| RELEASE HEIGHT (METERS) | 43.50 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL GROUND LEVEL RELEASES.

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

NO DECAY, UNDEPLETED

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
2.260 DAY DECAY, UNDEPLETED

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIR | 0.250 | 0.750 | 1.250 | 1.750 | 2.250 | 2.750 | 3.250 | 3.750 | 4.250 | 4.750 | 5.500 | 6.500 | |
| S | 5.464E-05 | 7.661E-06 | 3.339E-06 | 2.063E-06 | 1.444E-06 | 1.093E-06 | 8.682E-07 | 7.121E-07 | 5.983E-07 | 5.122E-07 | 4.170E-07 | 3.294E-07 | |
| SSW | 6.639E-05 | 9.148E-06 | 3.801E-06 | 2.369E-06 | 1.668E-06 | 1.270E-06 | 1.013E-06 | 8.328E-07 | 7.010E-07 | 6.009E-07 | 4.898E-07 | 3.870E-07 | |
| SW | 5.780E-05 | 8.171E-06 | 3.513E-06 | 2.164E-06 | 1.510E-06 | 1.145E-06 | 9.114E-07 | 7.482E-07 | 6.289E-07 | 5.384E-07 | 4.381E-07 | 3.455E-07 | |
| WSW | 1.998E-04 | 2.774E-05 | 1.132E-05 | 6.717E-06 | 4.604E-06 | 3.518E-06 | 2.830E-06 | 2.344E-06 | 1.986E-06 | 1.712E-06 | 1.406E-06 | 1.120E-06 | |
| W | 1.204E-04 | 1.654E-05 | 6.726E-06 | 3.988E-06 | 2.734E-06 | 2.087E-06 | 1.677E-06 | 1.388E-06 | 1.176E-06 | 1.013E-06 | 8.311E-07 | 6.617E-07 | |
| WNW | 2.090E-05 | 2.850E-06 | 1.267E-06 | 7.712E-07 | 5.347E-07 | 4.025E-07 | 3.180E-07 | 2.596E-07 | 2.171E-07 | 1.851E-07 | 1.497E-07 | 1.173E-07 | |
| NW | 6.365E-06 | 8.773E-07 | 3.879E-07 | 2.437E-07 | 1.718E-07 | 1.294E-07 | 1.021E-07 | 8.313E-08 | 6.937E-08 | 5.901E-08 | 4.759E-08 | 3.714E-08 | |
| NNW | 9.283E-06 | 1.282E-06 | 5.198E-07 | 3.129E-07 | 2.162E-07 | 1.643E-07 | 1.313E-07 | 1.081E-07 | 9.116E-08 | 7.823E-08 | 6.385E-08 | 5.051E-08 | |
| N | 1.197E-04 | 1.788E-05 | 8.450E-06 | 5.199E-06 | 3.602E-06 | 2.687E-06 | 2.103E-06 | 1.702E-06 | 1.413E-06 | 1.196E-06 | 9.593E-07 | 7.439E-07 | |
| NNE | 5.522E-04 | 8.101E-05 | 3.732E-05 | 2.328E-05 | 1.628E-05 | 1.222E-05 | 9.603E-06 | 7.801E-06 | 6.497E-06 | 5.516E-06 | 4.438E-06 | 3.456E-06 | |
| NE | 9.471E-04 | 1.368E-04 | 6.105E-05 | 3.826E-05 | 2.687E-05 | 2.024E-05 | 1.596E-05 | 1.300E-05 | 1.085E-05 | 9.235E-06 | 7.451E-06 | 5.818E-06 | |
| ENE | 3.333E-04 | 4.781E-05 | 2.126E-05 | 1.325E-05 | 9.284E-06 | 6.994E-06 | 5.518E-06 | 4.497E-06 | 3.756E-06 | 3.197E-06 | 2.581E-06 | 2.016E-06 | |
| E | 7.897E-05 | 1.133E-05 | 5.148E-06 | 3.211E-06 | 2.248E-06 | 1.685E-06 | 1.323E-06 | 1.074E-06 | 8.936E-07 | 7.581E-07 | 6.094E-07 | 4.738E-07 | |
| ESE | 2.667E-05 | 4.127E-06 | 2.003E-06 | 1.218E-06 | 8.366E-07 | 6.178E-07 | 4.790E-07 | 3.847E-07 | 3.172E-07 | 2.670E-07 | 2.124E-07 | 1.632E-07 | |
| SE | 1.537E-05 | 2.054E-06 | 8.595E-07 | 5.421E-07 | 3.838E-07 | 2.905E-07 | 2.298E-07 | 1.878E-07 | 1.572E-07 | 1.340E-07 | 1.085E-07 | 8.502E-08 | |
| SSE | 1.825E-05 | 2.539E-06 | 1.163E-06 | 7.171E-07 | 4.998E-07 | 3.742E-07 | 2.936E-07 | 2.383E-07 | 1.983E-07 | 1.683E-07 | 1.354E-07 | 1.054E-07 | |

| OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) | | DISTANCE INKM FROM THE SITE | | | | | | | | | | | |
|---|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| DIR | 7.500 | 8.500 | 9.500 | 12.500 | 17.500 | 22.500 | 27.500 | 32.500 | 37.500 | 42.500 | 47.500 | | |
| S | 2.688E-07 | 2.248E-07 | 1.916E-07 | 1.285E-07 | 7.782E-08 | 5.296E-08 | 3.867E-08 | 2.961E-08 | 2.347E-08 | 1.909E-08 | 1.586E-08 | | |
| SSW | 3.156E-07 | 2.635E-07 | 2.241E-07 | 1.491E-07 | 8.873E-08 | 5.919E-08 | 4.231E-08 | 3.169E-08 | 2.456E-08 | 1.955E-08 | 1.589E-08 | | |
| SW | 2.813E-07 | 2.346E-07 | 1.993E-07 | 1.321E-07 | 7.827E-08 | 5.201E-08 | 3.704E-08 | 2.765E-08 | 2.136E-08 | 1.695E-08 | 1.374E-08 | | |
| WSW | 9.189E-07 | 7.714E-07 | 6.591E-07 | 4.430E-07 | 2.664E-07 | 1.787E-07 | 1.280E-07 | 9.593E-08 | 7.429E-08 | 5.900E-08 | 4.783E-08 | | |
| W | 5.430E-07 | 4.558E-07 | 3.894E-07 | 2.618E-07 | 1.576E-07 | 1.059E-07 | 7.605E-08 | 5.712E-08 | 4.433E-08 | 3.530E-08 | 2.868E-08 | | |
| WNW | 9.501E-08 | 7.883E-08 | 6.666E-08 | 4.370E-08 | 2.549E-08 | 1.672E-08 | 1.176E-08 | 8.682E-09 | 6.635E-09 | 5.208E-09 | 4.177E-09 | | |
| NW | 2.996E-08 | 2.476E-08 | 2.086E-08 | 1.353E-08 | 7.763E-09 | 5.010E-09 | 3.470E-09 | 2.521E-09 | 1.896E-09 | 1.465E-09 | 1.157E-09 | | |
| NNW | 4.122E-08 | 3.443E-08 | 2.929E-08 | 1.946E-08 | 1.152E-08 | 7.625E-09 | 5.397E-09 | 3.998E-09 | 3.061E-09 | 2.404E-09 | 1.926E-09 | | |
| N | 5.968E-07 | 4.911E-07 | 4.121E-07 | 2.649E-07 | 1.504E-07 | 9.638E-08 | 6.646E-08 | 4.814E-08 | 3.613E-08 | 2.787E-08 | 2.198E-08 | | |
| NNE | 2.782E-06 | 2.296E-06 | 1.932E-06 | 1.250E-06 | 7.165E-07 | 4.628E-07 | 3.213E-07 | 2.342E-07 | 1.769E-07 | 1.373E-07 | 1.090E-07 | | |
| NE | 4.695E-06 | 3.883E-06 | 3.273E-06 | 2.127E-06 | 1.224E-06 | 7.928E-07 | 5.513E-07 | 4.023E-07 | 3.040E-07 | 2.360E-07 | 1.873E-07 | | |
| ENE | 1.628E-06 | 1.347E-06 | 1.136E-06 | 7.391E-07 | 4.261E-07 | 2.763E-07 | 1.924E-07 | 1.405E-07 | 1.063E-07 | 8.257E-08 | 6.555E-08 | | |
| E | 3.809E-07 | 3.140E-07 | 2.639E-07 | 1.702E-07 | 9.700E-08 | 6.229E-08 | 4.298E-08 | 3.113E-08 | 2.336E-08 | 1.801E-08 | 1.419E-08 | | |
| ESE | 1.299E-07 | 1.062E-07 | 8.858E-08 | 5.610E-08 | 3.129E-08 | 1.978E-08 | 1.348E-08 | 9.661E-09 | 7.184E-09 | 5.495E-09 | 4.298E-09 | | |
| SE | 6.882E-08 | 5.714E-08 | 4.833E-08 | 3.168E-08 | 1.845E-08 | 1.205E-08 | 8.447E-09 | 6.204E-09 | 4.717E-09 | 3.682E-09 | 2.936E-09 | | |
| SSE | 8.492E-08 | 7.015E-08 | 5.909E-08 | 3.840E-08 | 2.221E-08 | 1.449E-08 | 1.017E-08 | 7.503E-09 | 5.737E-09 | 4.510E-09 | 3.625E-09 | | |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|-------|--|--------|
| RELEASE HEIGHT (METERS) | 43.50 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL GROUND LEVEL RELEASES.

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

2.260 DAY DECAY, UNDEPLETED

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
8.000 DAY DECAY, DEPLETED

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE INKM FROM THE SITE
DIR 0.250 0.750 1.250 1.750 2.250 2.750 3.250 3.750 4.250 4.750 5.500 6.500

S 5.275E-05 7.083E-06 3.011E-06 1.831E-06 1.264E-06 9.465E-07 7.443E-07 6.052E-07 5.045E-07 4.290E-07 3.461E-07 2.706E-07
SSW 6.416E-05 8.479E-06 3.440E-06 2.114E-06 1.471E-06 1.109E-06 8.768E-07 7.161E-07 5.992E-07 5.110E-07 4.137E-07 3.247E-07
SW 5.586E-05 7.576E-06 3.181E-06 1.931E-06 1.332E-06 1.001E-06 7.899E-07 6.441E-07 5.382E-07 4.585E-07 3.707E-07 2.905E-07
WSW 1.931E-04 2.573E-05 1.026E-05 6.003E-06 4.069E-06 3.080E-06 2.459E-06 2.024E-06 1.705E-06 1.463E-06 1.194E-06 9.455E-07
W 1.164E-04 1.534E-05 6.094E-06 3.563E-06 2.415E-06 1.826E-06 1.456E-06 1.198E-06 1.008E-06 8.647E-07 7.052E-07 5.580E-07
WNW 2.020E-05 2.645E-06 1.150E-06 6.902E-07 4.734E-07 3.531E-07 2.770E-07 2.247E-07 1.869E-07 1.587E-07 1.277E-07 9.953E-08
NW 6.155E-06 8.147E-07 3.523E-07 2.185E-07 1.524E-07 1.139E-07 8.918E-08 7.222E-08 6.000E-08 5.084E-08 4.082E-08 3.173E-08
NNW 8.974E-06 1.189E-06 4.713E-07 2.798E-07 1.912E-07 1.440E-07 1.142E-07 9.349E-08 7.840E-08 6.699E-08 5.438E-08 4.280E-08
N 1.157E-04 1.661E-05 7.672E-06 4.658E-06 3.193E-06 2.362E-06 1.835E-06 1.477E-06 1.220E-06 1.029E-06 8.214E-07 6.343E-07
NNE 5.339E-04 7.520E-05 3.387E-05 2.085E-05 1.442E-05 1.073E-05 8.372E-06 6.761E-06 5.602E-06 4.737E-06 3.792E-06 2.939E-06
NE 9.157E-04 1.270E-04 5.542E-05 3.427E-05 2.381E-05 1.778E-05 1.392E-05 1.127E-05 9.366E-06 7.936E-06 6.372E-06 4.953E-06
ENE 3.223E-04 4.438E-05 1.930E-05 1.187E-05 8.228E-06 6.145E-06 4.814E-06 3.901E-06 3.242E-06 2.748E-06 2.208E-06 1.717E-06
E 7.636E-05 1.052E-05 4.674E-06 2.877E-06 1.993E-06 1.482E-06 1.155E-06 9.323E-07 7.721E-07 6.525E-07 5.220E-07 4.042E-07
ESE 2.579E-05 3.830E-06 1.817E-06 1.090E-06 7.406E-07 5.421E-07 4.174E-07 3.332E-07 2.734E-07 2.291E-07 1.813E-07 1.387E-07
SE 1.486E-05 1.906E-06 7.797E-07 4.851E-07 3.398E-07 2.549E-07 2.002E-07 1.626E-07 1.354E-07 1.150E-07 9.259E-08 7.221E-08
SSE 1.764E-05 2.355E-06 1.054E-06 6.409E-07 4.417E-07 3.276E-07 2.551E-07 2.057E-07 1.702E-07 1.438E-07 1.150E-07 8.898E-08

OANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE INKM FROM THE SITE
DIR 7.500 8.500 9.500 12.500 17.500 22.500 27.500 32.500 37.500 42.500 47.500

S 2.189E-07 1.817E-07 1.539E-07 1.022E-07 6.103E-08 4.120E-08 2.994E-08 2.284E-08 1.804E-08 1.463E-08 1.211E-08
SSW 2.634E-07 2.191E-07 1.858E-07 1.237E-07 7.391E-08 4.982E-08 3.609E-08 2.743E-08 2.157E-08 1.741E-08 1.433E-08
SW 2.353E-07 1.955E-07 1.657E-07 1.101E-07 6.559E-08 4.412E-08 3.190E-08 2.420E-08 1.900E-08 1.531E-08 1.259E-08
WSW 7.728E-07 6.469E-07 5.516E-07 3.723E-07 2.260E-07 1.540E-07 1.125E-07 8.602E-08 6.800E-08 5.510E-08 4.553E-08
W 4.558E-07 3.814E-07 3.252E-07 2.193E-07 1.331E-07 9.072E-08 6.629E-08 5.073E-08 4.012E-08 3.254E-08 2.690E-08
WNW 8.029E-08 6.646E-08 5.613E-08 3.700E-08 2.185E-08 1.460E-08 1.050E-08 7.926E-09 6.198E-09 4.975E-09 4.077E-09
NW 2.553E-08 2.108E-08 1.776E-08 1.163E-08 6.808E-09 4.512E-09 3.221E-09 2.416E-09 1.878E-09 1.498E-09 1.221E-09
NNW 3.481E-08 2.901E-08 2.465E-08 1.648E-08 9.897E-09 6.690E-09 4.854E-09 3.691E-09 2.903E-09 2.342E-09 1.927E-09
N 5.075E-07 4.171E-07 3.499E-07 2.269E-07 1.312E-07 8.624E-08 6.120E-08 4.568E-08 3.535E-08 2.811E-08 2.283E-08
NNE 2.358E-06 1.943E-06 1.634E-06 1.065E-06 6.200E-07 4.094E-07 2.915E-07 2.182E-07 1.693E-07 1.350E-07 1.099E-07
NE 3.985E-06 3.290E-06 2.772E-06 1.816E-06 1.063E-06 7.047E-07 5.033E-07 3.777E-07 2.937E-07 2.345E-07 1.912E-07
ENE 1.382E-06 1.142E-06 9.628E-07 6.315E-07 3.703E-07 2.458E-07 1.758E-07 1.321E-07 1.028E-07 8.217E-08 6.704E-08
E 3.241E-07 2.669E-07 2.243E-07 1.460E-07 8.483E-08 5.593E-08 3.976E-08 2.972E-08 2.303E-08 1.833E-08 1.490E-08
ESE 1.101E-07 8.985E-08 7.491E-08 4.784E-08 2.715E-08 1.759E-08 1.234E-08 9.120E-09 6.999E-09 5.525E-09 4.458E-09
SE 5.827E-08 4.829E-08 4.081E-08 2.694E-08 1.592E-08 1.064E-08 7.642E-09 5.764E-09 4.502E-09 3.610E-09 2.954E-09
SSE 7.135E-08 5.875E-08 4.939E-08 3.220E-08 1.876E-08 1.242E-08 8.864E-09 6.655E-09 5.180E-09 4.143E-09 3.384E-09

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|-------|--|--------|
| RELEASE HEIGHT (METERS) | 43.50 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL GROUND LEVEL RELEASES.

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE
8.000 DAY DECAY, DEPLETED

OXOQDOQ - TPC NPP # 1

EXIT ONE - BUILDING VENT -NO PURGE RELEASE

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****

| DIR | DISTANCES IN KM | | | | | | | | | | | |
|-----|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 0.25 | 0.75 | 1.25 | 1.75 | 2.25 | 2.75 | 3.25 | 3.75 | 4.25 | 4.75 | 5.50 | 6.50 |
| S | 5.533E-08 | 1.040E-08 | 4.495E-09 | 2.538E-09 | 1.648E-09 | 1.165E-09 | 8.705E-10 | 6.774E-10 | 5.435E-10 | 4.465E-10 | 3.441E-10 | 2.554E-10 |
| SSW | 3.978E-08 | 7.480E-09 | 3.232E-09 | 1.825E-09 | 1.185E-09 | 8.373E-10 | 6.259E-10 | 4.871E-10 | 3.907E-10 | 3.210E-10 | 2.474E-10 | 1.836E-10 |
| SW | 4.428E-08 | 8.325E-09 | 3.597E-09 | 2.031E-09 | 1.319E-09 | 9.319E-10 | 6.966E-10 | 5.421E-10 | 4.349E-10 | 3.573E-10 | 2.754E-10 | 2.044E-10 |
| WSW | 6.828E-08 | 1.284E-08 | 5.547E-09 | 3.132E-09 | 2.034E-09 | 1.437E-09 | 1.074E-09 | 8.359E-10 | 6.706E-10 | 5.509E-10 | 4.246E-10 | 3.151E-10 |
| W | 4.389E-08 | 8.252E-09 | 3.566E-09 | 2.013E-09 | 1.308E-09 | 9.238E-10 | 6.905E-10 | 5.374E-10 | 4.311E-10 | 3.541E-10 | 2.730E-10 | 2.026E-10 |
| WNW | 1.211E-08 | 2.278E-09 | 9.841E-10 | 5.556E-10 | 3.609E-10 | 2.550E-10 | 1.906E-10 | 1.483E-10 | 1.190E-10 | 9.774E-11 | 7.534E-11 | 5.591E-11 |
| NW | 2.835E-09 | 5.331E-10 | 2.303E-10 | 1.300E-10 | 8.447E-11 | 5.968E-11 | 4.461E-11 | 3.471E-11 | 2.785E-11 | 2.288E-11 | 1.763E-11 | 1.309E-11 |
| NNW | 3.503E-09 | 6.586E-10 | 2.846E-10 | 1.607E-10 | 1.044E-10 | 7.373E-11 | 5.511E-11 | 4.289E-11 | 3.440E-11 | 2.826E-11 | 2.179E-11 | 1.617E-11 |
| N | 5.124E-08 | 9.635E-09 | 4.163E-09 | 2.350E-09 | 1.527E-09 | 1.079E-09 | 8.062E-10 | 6.274E-10 | 5.033E-10 | 4.135E-10 | 3.187E-10 | 2.365E-10 |
| NNE | 2.442E-07 | 4.592E-08 | 1.984E-08 | 1.120E-08 | 7.275E-09 | 5.140E-09 | 3.842E-09 | 2.990E-09 | 2.399E-09 | 1.970E-09 | 1.519E-09 | 1.127E-09 |
| NE | 4.018E-07 | 7.555E-08 | 3.264E-08 | 1.843E-08 | 1.197E-08 | 8.457E-09 | 6.321E-09 | 4.919E-09 | 3.946E-09 | 3.242E-09 | 2.499E-09 | 1.854E-09 |
| ENE | 1.285E-07 | 2.416E-08 | 1.044E-08 | 5.893E-09 | 3.827E-09 | 2.704E-09 | 2.021E-09 | 1.573E-09 | 1.262E-09 | 1.037E-09 | 7.990E-10 | 5.930E-10 |
| E | 3.501E-08 | 6.583E-09 | 2.844E-09 | 1.606E-09 | 1.043E-09 | 7.369E-10 | 5.508E-10 | 4.287E-10 | 3.439E-10 | 2.825E-10 | 2.177E-10 | 1.616E-10 |
| ESE | 1.465E-08 | 2.754E-09 | 1.190E-09 | 6.719E-10 | 4.364E-10 | 3.083E-10 | 2.305E-10 | 1.794E-10 | 1.439E-10 | 1.182E-10 | 9.111E-11 | 6.761E-11 |
| SE | 8.974E-09 | 1.687E-09 | 7.290E-10 | 4.116E-10 | 2.673E-10 | 1.889E-10 | 1.412E-10 | 1.099E-10 | 8.814E-11 | 7.241E-11 | 5.581E-11 | 4.142E-11 |
| SSE | 1.216E-08 | 2.287E-09 | 9.882E-10 | 5.579E-10 | 3.624E-10 | 2.560E-10 | 1.914E-10 | 1.489E-10 | 1.195E-10 | 9.815E-11 | 7.566E-11 | 5.614E-11 |

| ODIR | DISTANCES IN KM | | | | | | | | | | | |
|------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | 7.50 | 8.50 | 9.50 | 12.50 | 17.50 | 22.50 | 27.50 | 32.50 | 37.50 | 42.50 | 47.50 | |
| S | 1.975E-10 | 1.576E-10 | 1.289E-10 | 8.063E-11 | 4.658E-11 | 3.051E-11 | 2.158E-11 | 1.609E-11 | 1.246E-11 | 9.934E-12 | 8.103E-12 | |
| SSW | 1.420E-10 | 1.133E-10 | 9.265E-11 | 5.798E-11 | 3.349E-11 | 2.193E-11 | 1.552E-11 | 1.157E-11 | 8.959E-12 | 7.143E-12 | 5.826E-12 | |
| SW | 1.581E-10 | 1.261E-10 | 1.031E-10 | 6.453E-11 | 3.727E-11 | 2.441E-11 | 1.727E-11 | 1.287E-11 | 9.971E-12 | 7.950E-12 | 6.484E-12 | |
| WSW | 2.437E-10 | 1.945E-10 | 1.590E-10 | 9.950E-11 | 5.748E-11 | 3.765E-11 | 2.663E-11 | 1.985E-11 | 1.538E-11 | 1.226E-11 | 9.999E-12 | |
| W | 1.567E-10 | 1.250E-10 | 1.022E-10 | 6.396E-11 | 3.695E-11 | 2.420E-11 | 1.712E-11 | 1.276E-11 | 9.884E-12 | 7.880E-12 | 6.428E-12 | |
| WNW | 4.324E-11 | 3.451E-11 | 2.821E-11 | 1.765E-11 | 1.020E-11 | 6.679E-12 | 4.725E-12 | 3.523E-12 | 2.728E-12 | 2.175E-12 | 1.774E-12 | |
| NW | 1.012E-11 | 8.077E-12 | 6.603E-12 | 4.132E-12 | 2.387E-12 | 1.563E-12 | 1.106E-12 | 8.245E-13 | 6.385E-13 | 5.091E-13 | 4.152E-13 | |
| NNW | 1.250E-11 | 9.978E-12 | 8.158E-12 | 5.105E-12 | 2.949E-12 | 1.931E-12 | 1.366E-12 | 1.019E-12 | 7.889E-13 | 6.289E-13 | 5.130E-13 | |
| N | 1.829E-10 | 1.460E-10 | 1.193E-10 | 7.468E-11 | 4.314E-11 | 2.825E-11 | 1.999E-11 | 1.490E-11 | 1.154E-11 | 9.201E-12 | 7.505E-12 | |
| NNE | 8.718E-10 | 6.956E-10 | 5.687E-10 | 3.559E-10 | 2.056E-10 | 1.346E-10 | 9.525E-11 | 7.101E-11 | 5.500E-11 | 4.385E-11 | 3.577E-11 | |
| NE | 1.434E-09 | 1.145E-09 | 9.357E-10 | 5.855E-10 | 3.383E-10 | 2.215E-10 | 1.567E-10 | 1.168E-10 | 9.049E-11 | 7.214E-11 | 5.884E-11 | |
| ENE | 4.586E-10 | 3.660E-10 | 2.992E-10 | 1.872E-10 | 1.082E-10 | 7.084E-11 | 5.011E-11 | 3.736E-11 | 2.893E-11 | 2.307E-11 | 1.882E-11 | |
| E | 1.250E-10 | 9.973E-11 | 8.154E-11 | 5.102E-11 | 2.947E-11 | 1.930E-11 | 1.366E-11 | 1.018E-11 | 7.885E-12 | 6.286E-12 | 5.128E-12 | |
| ESE | 5.230E-11 | 4.173E-11 | 3.412E-11 | 2.135E-11 | 1.233E-11 | 8.077E-12 | 5.714E-12 | 4.260E-12 | 3.299E-12 | 2.630E-12 | 2.145E-12 | |
| SE | 3.203E-11 | 2.556E-11 | 2.090E-11 | 1.308E-11 | 7.555E-12 | 4.948E-12 | 3.500E-12 | 2.609E-12 | 2.021E-12 | 1.611E-12 | 1.314E-12 | |
| SSE | 4.343E-11 | 3.465E-11 | 2.833E-11 | 1.773E-11 | 1.024E-11 | 6.707E-12 | 4.745E-12 | 3.537E-12 | 2.740E-12 | 2.184E-12 | 1.782E-12 | |

OVENT AND BUILDING PARAMETERS:

| | | | |
|-------------------------|-------|--|--------|
| RELEASE HEIGHT (METERS) | 43.50 | REP. WIND HEIGHT (METERS) | 10.0 |
| DIAMETER (METERS) | 0.00 | BUILDING HEIGHT (METERS) | 56.0 |
| EXIT VELOCITY (METERS) | 0.00 | BLDG. MIN. CRS. SEC. AREA (SQ. METERS) | 1875.0 |
| | | HEAT EMISSION RATE (CAL/SEC) | 0.0 |

OALL GROUND LEVEL RELEASES.

(3) 雨量報表

單位：mm

| 日期 | 7月 | 8月 | 9月 |
|----|-------|-------|------|
| 1 | 0 | 2 | 0 |
| 2 | 0 | 0 | 0 |
| 3 | 0 | 8 | 0 |
| 4 | 0 | 0 | 3 |
| 5 | 0 | 1 | 0 |
| 6 | 0 | 8 | 0 |
| 7 | 0 | 73 | 0 |
| 8 | 0 | 1.5 | 0 |
| 9 | 0 | 0.5 | 2 |
| 10 | 0 | 0 | 2 |
| 11 | 0 | 0 | 0 |
| 12 | 0 | 0 | 26.5 |
| 13 | 0 | 0 | 0 |
| 14 | 0 | 29 | 0 |
| 15 | 0 | 0 | 25 |
| 16 | 0 | 0 | 0 |
| 17 | 0 | 0 | 1 |
| 18 | 0 | 0 | 0 |
| 19 | 0 | 11 | 0 |
| 20 | 1 | 0 | 0 |
| 21 | 40 | 0 | 0 |
| 22 | 38 | 0 | 0 |
| 23 | 14 | 0 | 0 |
| 24 | 83 | 0 | 5 |
| 25 | 1.5 | 0 | 0 |
| 26 | 0 | 0 | 0 |
| 27 | 0 | 0 | 0 |
| 28 | 0 | 0 | 0 |
| 29 | 4 | 0 | 0 |
| 30 | 7 | 0 | 0 |
| 31 | 54.5 | 0 | 0 |
| 共計 | 243.0 | 134.0 | 42.0 |

8.2 各排放核種最小可測量

一、廢水排放

| NO. | 核種名稱 | MDA(Bq/m ³) | NO. | 核種名稱 | MDA(Bq/m ³) |
|-----|---------|-------------------------|-----|---------|-------------------------|
| 1 | Cr-51 | 1.35E+04 | 21 | Te-131m | 3.60E+03 |
| 2 | Mn-54 | 2.38E+03 | 22 | Te-132 | 1.49E+03 |
| 3 | Co-57 | 1.21E+03 | 23 | Cs-134 | 1.48E+03 |
| 4 | Co-58 | 1.85E+03 | 24 | Cs-136 | 2.13E+03 |
| 5 | Fe-59 | 4.05E+03 | 25 | Cs-137 | 2.41E+03 |
| 6 | Co-60 | 5.45E+03 | 26 | Ce-139 | 1.68E+03 |
| 7 | Zn-65 | 4.06E+03 | 27 | Ba-140 | 6.49E+03 |
| 8 | Nb-95 | 1.58E+03 | 28 | La-140 | 5.78E+02 |
| 9 | Zr-95 | 2.16E+03 | 29 | Ce-141 | 2.41E+03 |
| 10 | Nb-97 | 2.47E+03 | 30 | Ce-143 | 3.92E+03 |
| 11 | Zr-97 | 1.88E+03 | 31 | Ce-144 | 1.21E+04 |
| 12 | Mo-99 | 1.49E+03 | 32 | W-187 | 5.11E+03 |
| 13 | Ru-103 | 1.73E+03 | 33 | Np-239 | 4.94E+03 |
| 14 | Ru-105 | 6.81E+03 | 34 | Fe-55 | 4.70E+03 |
| 15 | Ru-106 | 1.08E+04 | 35 | Sr-89 | 2.42E+03 |
| 16 | Cd-109 | 2.77E+04 | 36 | Sr-90 | 4.70E+02 |
| 17 | Ag-110m | 1.87E+03 | 37 | H-3 | 1.31E+04 |
| 18 | Sn-113 | 3.01E+03 | | | |
| 19 | Sb-125 | 5.12E+03 | | | |
| 20 | I-131 | 1.73E+03 | | | |

註：本表第 1～第 33 項為 γ 核種，34～37 為 β 核種，本表 MDA 係 109.08 更新。

二、廢氣排放

| NO. | 分裂及活化核種 | MDA(Bq/m ³) | NO. | 微粒核種 | MDA(Bq/m ³) |
|-----|----------------|-------------------------|-----|---------|-------------------------|
| 1 | Ar-41 | 3.37E+02 | 1 | Cr-51 | 1.74E-02 |
| 2 | Kr-85 | 8.28E+04 | 2 | Mn-54 | 1.92E-03 |
| 3 | Kr-85m | 2.94E+02 | 3 | Co-58 | 1.95E-03 |
| 4 | Kr-87 | 8.31E+02 | 4 | Fe-59 | 9.78E-04 |
| 5 | Kr-88 | 9.98E+02 | 5 | Co-60 | 2.97E-03 |
| 6 | Kr-89 | 4.21E+08 | 6 | Zn-65 | 5.49E-03 |
| 7 | Xe-131m | 8.93E+03 | 7 | Nb-95 | 2.27E-03 |
| 8 | Xe-133 | 4.91E+02 | 8 | Zr-95 | 3.66E-03 |
| 9 | Xe-133m | 1.98E+03 | 9 | Mo-99 | 2.87E-03 |
| 10 | Xe-135 | 2.47E+02 | 10 | Ru-103 | 2.38E-03 |
| 11 | Xe-135m | 4.74E+03 | 11 | Ag-110m | 2.03E-03 |
| 12 | Xe-137 | 3.07E+07 | 12 | Sb-124 | 1.61E-03 |
| 13 | Xe-138 | 1.19E+04 | 13 | Sb-125 | 5.58E-03 |
| 14 | N-13 | 1.28E+04 | 14 | Cs-134 | 2.45E-03 |
| NO. | 碘核種 | MDA(Bq/m ³) | 15 | Cs-136 | 2.26E-03 |
| 1 | I-131 | 3.55E-03 | 16 | Cs-137 | 2.09E-03 |
| 2 | I-133 | 1.27E-02 | 17 | Ba-140 | 7.36E-03 |
| NO. | 其他核種 | MDA(Bq/m ³) | 18 | Ce-141 | 2.49E-03 |
| 1 | H-3 | 1.88E-01 | 19 | Ce-144 | 9.92E-03 |
| 2 | Gross α | 6.54E-06 | 20 | Sr-89 | 3.92E-04 |
| | | | 21 | Sr-90 | 8.72E-05 |

註：本表 MDA 係 109.08 年更新。