

RE: FMPA's Response to 2011 Ten-Year Site Plan Supplemental Data Request #1

Attached is Florida Municipal Power Agency's Response to 2011 Ten-Year Site Plan Supplemental Data Request #1, submitted by April 29, 2011. Please place this item in Docket No. 110000 – Undocketed Filings for 2011, as it relates to the annual undocketed staff Ten-Year Site Plan Review project.

If you have any additional questions, please contact me.

POE

Attachment

COMMISSION

DOCUMENT NUMBER-DATE - 03136 MAY -5 = FPSC-COMMISSION CLERK

2011 TEN YEAR SITE PLANS : SUPPLEMENTAL DATA REQUEST

Company Name: Florida Municipal Power Agency (FMPA), as agent for the All-Requirements Power Supply Project (the "ARP")

Renewable Generation Resources

As used in the proceeding questions, the term "renewable energy" has the same meaning as used in Section 377.803, Florida Statutes. Please refer to the tables below when identifying fuel and generator types.

| Fuel Types | Shorthand | Examples |
|--------------|-----------|--|
| Biomass | AB | Agriculture By-Products, Bagasse, Straw, Energy Crops. |
| | MSW | Municipal Solid Waste |
| | SLW | Sludge Waste. |
| | WDS | Wood / Wood Waste Solids |
| | OBS | Biomass Solids |
| Landfill Gas | LFG | Landfill gas. |
| Water | WAT | Hydro |
| Geothermal | GEO | Geothermal |
| Biofuels | WDL | Wood / Wood Waste Liquids |
| | BL | Black Liquor |
| | OBL | Biomass Liquids |
| | OBG | Biomass Gases |
| Solar | SUN | Solar Photovoltaic and Thermal devices |
| Waste Heat | WH | Waste heat from sulfuric acid manufacture |
| Wind | WND | Wind Energy. |
| Other | OTH | Any renewable not covered above. Please describe. |

| Generation Types | Shorthand |
|--|-----------|
| Combined Cycle - Steam Part | CA |
| Combined Cycle - Combustion Turbine Part | CT |
| Combined Cycle - Total Unit | CC |
| Compressed Air Energy Storage | CE |
| Combined Cycle Single Shaft | CS |
| Fuel Cell | FC |
| Combustion Turbine | GT |
| Hydraulic Turbine | HY |
| Hydraulic Turbine - Pumped Storage | PS |
| Internal Combustion Engine | IC |
| Not Available | NA |
| Other | OT |
| Photovoltaic Cells | PV |
| Steam Turbine | ST |
| Wind Turbine | WT |

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GENERAL QUESTIONS

 Please provide all data requested in the attached forms labeled 'Appendix A,' in electronic (Excel) and hard copy. If any of the requested data is already included in the Company's Ten-Year Site Plan, state so on the appropriate form.

The requested information is being provided in hard copy and electronically as "FMPA Supplemental Appendix A_2011.xls."

2. Please provide all data requested in the attached forms labeled 'Appendix B,' which consist of Schedules 1 through 10 from the Company's Ten-Year Site Plan, in an electronic copy in Excel (.xls file format).

The requested information is being provided electronically as "FMPA Supplemental Appendix B_2011.xls." A hard copy has already been provided as part of FMPA's Ten-Year Site Plan.

LOAD & DEMAND FORECASTING

3. Please provide, on a system-wide basis, an average month of observed peak capacity values for Summer and Winter. From this data, excluding weekends and holidays, generate an average seasonal Daily Loading Curve. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

The tables below provides 30 days of average hourly load data for the ARP during the 2009-2010 Winter season (December 2009 – February 2010) and the month that most represented the 30 day average, which was February.

| | | _ | - | | | | | A | verage | 30 Da | vs of t | .oad Da | ita Du | ring 20 | 09-20 | 10 Wi | nter S | cason | | _ | _ | | | | | _ | | | |
|------|-------------|------------|--------|------|-------|------|------|-------|--------|-------|---------|---------|--------|---------|--------|--------|---------|-------|-----|-------|------|------|------|------|-----|-----|-----|-------|-------|
| | 14.54 | | Day of | | | 9. | 1 | | 1000 | | | 100 | Obser | vert Ho | urly P | eak Ca | quacity | (MW) | 1 | 1.1.1 | 2 | al P | 1.00 | 1 | - | | - | MAX | MIN |
| rear | Month | Day | Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | (MBV) | (106) |
| 2010 | Avg[1] | 1 | - 1 | 681 | 662 | 661 | 674 | 698 | 764 | 867 | 924 | 915 | 887 | 852 | 815 | 775 | 743 | 712 | 700 | 711 | 769 | 854 | 860 | 843 | 798 | 738 | 679 | 924 | 661 |
| 2010 | Avg [1] | 2 | 2 | 579 | \$54 | 541 | 541 | 564 | 620 | 717 | 771 | 782 | 787 | 781 | 772 | 758 | 746 | 731 | 726 | 732 | 778 | 849 | 856 | 836 | 790 | 725 | 661 | 856 | 541 |
| 2010 | Avg[1] | 3 | 3 | 622 | 605 | 600 | 606 | 632 | 689 | 796 | 849 | 858 | 851 | 836 | 822 | 799 | 779 | 760 | 746 | 755 | 800 | 876 | 886 | 869 | 828 | 766 | 701 | 386 | 6(1) |
| 2010 | Avg [1] | 4 | 4 | 658 | 639 | 635 | 640 | 660 | 721 | 821 | 870 | 870 | 835 | 808 | 784 | .756 | 734 | 717 | 704 | 702 | 738 | 805 | 806 | 784 | 738 | 677 | 614 | 870 | 614 |
| 2010 | Avg [4] | 5 | 5 | 569 | \$47 | 539 | 534 | \$49 | 596 | 683 | 729 | 733 | 735 | 739 | 737 | 732 | 727 | 719 | 721 | 732 | 761 | 794 | 776 | 749 | 712 | 664 | 612 | 794 | 534 |
| 2010 | Avg | 6 | 6 | \$73 | 549 | \$39 | 539 | 553 | \$75 | 620 | 670 | 736 | 791 | 820 | 825 | 816 | 8617 | 793 | 782 | 780 | 812 | 870 | 876 | 867 | 840 | 805 | 763 | 876 | 539 |
| 2010 | Avg [1] | 7 | 7 | 732 | 716 | 711 | 715 | 729 | 756 | 806 | 852 | 897 | 907 | 888 | 846 | 809 | 771 | 741 | 733 | 735 | 790 | 870 | 883 | 877 | 845 | 804 | 750 | 907 | 711 |
| 2010 | Avg[1] | 8 | 1 | 714 | 705 | 707 | 718 | 752 | 814 | 931 | 986 | 970 | 927 | 884 | 836 | 795 | 756 | 739 | 720 | 724 | 770 | 854 | 871 | 859 | 813 | 750 | 692 | 986 | 692 |
| 2010 | Avg[1] | 9 | 2 | 652 | 639 | 638 | 648 | 675 | 738 | 843 | 891 | 886 | 851 | 818 | 789 | 778 | 763 | 752 | 740 | 741 | 781 | 843 | 845 | \$20 | 773 | 707 | 644 | 891 | 638 |
| 2010 | Ave 1 | 10 | 3 | 601 | 588 | 587 | 399 | 630 | 703 | 822 | 885 | 388 | 867 | 847 | 820 | 795 | 772 | 752 | 744 | 746 | 784 | 868 | 885 | 869 | 828 | 766 | 700 | 888 | 587 |
| 2040 | Avg [1] | 11 | 4 | 659 | 645 | 644 | 655 | 687 | 757 | 857 | 902 | -968 | 874 | 838 | 798 | 756 | 728 | 706 | 693 | 699 | 735 | 799 | 803 | 779 | 735 | 670 | 605 | 905 | 605 |
| 2010 | Avg [1] | 12 | - 5 | 557 | 537 | 530 | 532 | 552 | 607 | 703 | 762 | 771 | 766 | 761 | 749 | 741 | 735 | 730 | 733 | 740 | 763 | 796 | 781 | 754 | 716 | 665 | 610 | 796 | 530 |
| 2010 | Avg[]] | 13 | 6 | 564 | 541 | 530 | 528 | \$34 | 559 | 598 | 642 | 697 | 741 | 759 | 747 | 721 | 692 | 670 | 6:4 | 660 | 692 | 748 | 752 | 734 | 710 | 670 | 622 | 759 | 528 |
| 2010 | Avg [1] | 14 | 7 | 580 | 558 | 547 | 546 | 556 | 582 | 612 | 651 | 698 | 724 | 718 | 710 | 701 | 686 | 677 | 668 | 666 | 688 | 747 | 746 | 724 | 685 | 634 | 580 | 747 | 546 |
| 2010 | Ave [1] | 15 | 1 | 536 | 513 | 508 | 513 | \$35 | 589 | 666 | 719 | 730 | 738 | 729 | 716 | 706 | 699 | 695 | 695 | 695 | 712 | 771 | 765 | 735 | 682 | 617 | 550 | 771 | 508 |
| 2010 | Avg[1] | 16 | 2 | 503 | 481 | 477 | 483 | 5(19) | 572 | 684 | 752 | 758 | 754 | 744 | 733 | 725 | 720 | 714 | 707 | 705 | 730 | 800 | 813 | 790 | 747 | 681 | 611 | 813 | 477 |
| 2010 | Avg[1] | 17 | 3 | 567 | \$49 | \$46 | 551 | 578 | 646 | 755 | SUS | 798 | 778 | 754 | 735 | 714 | 701 | 688 | 682 | 683 | 712 | 778 | 786 | 763 | 719 | 656 | 589 | 808 | .546 |
| 2010 | Ave[1] | 18 | 4 | 545 | 524 | 517 | \$21 | 543 | 602 | 701 | 754 | 750 | 739 | 740 | 722 | 708 | 696 | 681 | 672 | 678 | 706 | 757 | 763 | 747 | 705 | 645 | 585 | 763 | 517 |
| 2010 | Avg [1] | 19 | 5 | 538 | -513 | 503 | 502 | 519 | \$67 | 657 | 705 | 732 | 739 | 734 | 721 | 704 | 692 | 682 | 675 | 673 | 687 | 731 | 724 | 696 | 656 | 605 | 548 | 739 | 502 |
| 2010 | Avg [1] | 20 | 6 | 499 | 473 | 459 | 454 | 461 | 489 | 531 | 574 | 624 | 645 | 647 | 636 | 621 | 608 | 599 | 594 | 595 | 620 | 670 | 670 | 648 | 617 | 578 | 535 | 670 | 454 |
| 2010 | Avg [1] | 21 | 7 | 496 | 473 | 464 | 465 | 474 | 498 | 537 | 576 | 622 | 642 | 642 | 633 | 625 | 617 | 610 | 607 | 608 | 642 | 699 | 705 | 686 | 645 | 396 | 542 | 705 | 464 |
| 2010 | Ave [1] | 22 | 1 | 496 | 473 | 465 | 466 | 483 | 528 | 612 | 670 | 698 | 707 | 711 | 696 | 679 | 665 | 649 | 640 | 644 | 673 | 735 | 743 | 717 | 670 | 609 | 548 | 743 | 465 |
| 2010 | Avg[1] | 23 | 2 | 504 | 479 | 471 | 473 | 493 | 548 | 645 | 702 | 714 | 706 | 694 | 675 | 661 | 650 | 637 | 632 | 633 | 654 | 713 | 725 | 702 | 665 | 609 | 549 | 725 | 471 |
| 2010 | Avg [1] | .24 | 3 | 508 | 487 | 479 | 482 | 503 | 359 | 636 | 709 | 716 | 696 | 688 | 672 | 656 | 645 | 634 | 629 | 632 | .662 | 722 | 725 | 705 | 671 | 620 | 564 | 725 | 479 |
| 2010 | Avg [1] | 25 | 4 | 516 | 509 | 515 | 531 | 568 | 644 | 769 | 838 | 822 | 779 | 743 | 709 | 676 | 650 | 627 | 618 | 619 | 641 | 717 | 756 | 752 | 721 | 670 | 622 | 838 | 5(79 |
| 2010 | Avg [1] | 26 | 5 | 592 | 585 | 591 | 606 | 638 | 712 | 810 | 859 | 826 | 785 | 734 | 695 | 661 | 636 | 615 | 503 | 600 | 610 | 666 | 690 | 680 | 658 | 624 | 584 | 859 | 584 |
| 2010 | Avg[1] | 27 | 6 | 529 | 508 | 497 | 494 | 500 | 521 | 356 | 592 | 638 | 677 | 700 | 701 | 692 | 677 | 661 | 649 | 647 | 673 | 725 | 731 | 714 | 685 | 645 | 601 | 731 | 494 |
| 2010 | Avg[1] | 28 | 7 | 561 | 538 | 529 | 530 | 547 | 571 | 614 | 656 | 699 | 719 | 715 | 696 | 679 | 658 | 641 | 632 | 638 | 674 | 741 | 759 | 743 | 711 | 664 | 611 | 759 | 529 |
| 2010 | Avell | 29 | 1 | 582 | \$\$6 | 545 | 542 | 559 | 597 | 658 | 713 | 751 | 767 | 771 | 752 | 729 | 708 | 689 | 679 | 688 | 736 | 828 | 836 | 824 | 793 | 749 | 699 | 836 | 542 |
| 2010 | Avg [1] | 30 | 2 | 667 | 653 | 653 | 670 | 708 | 770 | 857 | 934 | 974 | 954 | 914 | 854 | 792 | 759 | 717 | 709 | 721 | 786 | 889 | 898 | 885 | 849 | 792 | 734 | 974 | 653 |
| 1 | | AVG [2] | | 580 | 562 | 558 | 564 | 588 | 649 | 750 | 804 | 806 | 790 | 772 | 750 | 729 | 712 | 697 | 689 | 692 | 723 | 786 | 793 | 772 | 731 | 673 | 614 | 806 | 558 |
| | and the set | MAX | | 732 | 716 | 711 | 718 | 752 | 814 | 931 | 986 | 974 | 954 | 914 | 854 | 816 | 807 | 793 | 782 | 780 | 812 | 889 | 898 | 885 | 849 | 805 | 763 | 986 | |
| | 1 | MIN | 1. | 496 | 473 | 459 | 454 | 461 | 489 | 531 | \$74 | 622 | 642 | 642 | 613 | 621 | 608 | \$99 | 594 | 595 | 610 | 666 | 670 | 648 | 617 | 578 | 535 | | 454 |

The average month is made up of the averages of December 2009 - February 2010 excluding NERC holidays
Average day excludes weekends and NERC holidays

| | | | _ | | | | | | | Τv | x cal W | inter . | Nonth | tor 20 | 10: Fe | bruar | <u>y</u> | | | _ | | <i>6</i> | | | | | | | |
|------|----------|--------|--------|-----|-----|-------|------|-----|------|------|---------|---------|-------|--------|--------|--------|----------|-------|-----|------|------|----------|------|------|-------|-----|-----|----------|------|
| | | ant of | Day of | - | | | | - | | | | - | Obser | ved Ho | urly P | cak C: | macity | (NRV) | | - | - | - | - | | | | _ | MAY | MIN |
| Year | Month | Day | Week | I | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 4 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | (ABA) | INN |
| 2010 | Feb | 1 | 1 | 553 | 529 | 519 | 516 | 534 | 588 | 678 | 718 | 712 | 705 | 698 | 691 | 677 | 664 | 651 | 651 | 660 | 691 | 735 | 720 | 686 | 627 | 559 | 495 | 924 | 661 |
| 2010 | Feb | 2 | 2 | 445 | 418 | 407 | 403 | 415 | 465 | 551 | 597 | 616 | 634 | 652 | 653 | 647 | 6,19 | 631 | 627 | 631 | 647 | 692 | 693 | 663 | 613 | 551 | 490 | ×56 | \$41 |
| 2910 | Feh | 3 | 3 | 451 | 431 | 424 | 427 | 452 | 508 | 511 | 667 | 672 | 671 | 665 | 648 | 633 | 620 | 612 | 606 | 611 | 631 | 700 | 710 | 694 | 651 | 595 | 536 | 886 | 600 |
| 2010 | Feb | 4 | 4 | 498 | 479 | 470 | 471 | 489 | 542 | 634 | 673 | 665 | 646 | 636 | 629 | 623 | 618 | 613 | 611 | 612 | 623 | 675 | 678 | 648 | 597 | 534 | 471 | 870 | 614 |
| 2010 | Feb | 5 | 5 | 424 | 398 | 388 | 384 | 399 | 446 | 528 | \$74 | 589 | 610 | 631 | 637 | 639 | 640 | 635 | 641 | 646 | 650 | 674 | 656 | 624 | 582 | 529 | 474 | 794 | 514 |
| 2010 | Feb | 6 | 6 | 433 | 404 | 389 | 383 | 389 | 409 | 447 | 484 | 540 | 579 | 597 | 597 | 587 | 577 | 563 | 557 | 557 | 576 | 633 | 645 | 628 | 600 | 563 | 523 | 876 | 539 |
| 2010 | Feb | 7 | 7 | 490 | 473 | 469 | 471 | 484 | 505 | 558 | 605 | 663 | 698 | 702 | 678 | 649 | 622 | 601 | 592 | 597 | 630 | 689 | 705 | 702 | 680 | 666 | 619 | 907 | 711 |
| 2010 | Feb | 8 | 1 | 589 | 581 | 587 | 6631 | 638 | 710 | 832 | 892 | 859 | 799 | 745 | 691 | 659 | 620 | 611 | 596 | 598 | 623 | 693 | 712 | 693 | 647 | 586 | 528 | 986 | 692 |
| 2010 | Feb | 9 | 2 | 493 | 480 | 479 | 483 | 511 | 573 | 674 | 713 | 704 | 694 | 682 | 671 | 671 | 675 | 669 | (69 | 669 | 684 | 724 | 719 | 683 | 625 | 558 | 498 | 891 | 638 |
| 2010 | Feb | 10 | 3 | 454 | 434 | 431 | 446 | 487 | 575 | 713 | 790 | 801 | 787 | 765 | 736 | 706 | 675 | 651 | 639 | 644 | 687 | 786 | 835 | 841 | 815 | 765 | 717 | 888 | 587 |
| 2010 | Feb | Н | 4 | 689 | 683 | 690 | 710 | 753 | 848 | 952 | 1004 | 980 | 940 | 885 | 831 | 772 | 724 | 700 | 692 | 713 | 752 | 833 | 853 | 837 | 795 | 726 | 663 | 905 | 605 |
| 2010 | Feb | 12 | 5 | 616 | 593 | 587 | 590 | 618 | 679 | 774 | 823 | 831 | 834 | 838 | \$34 | 832 | 829 | 824 | 833 | 848 | 852 | 866 | 857 | 835 | 798 | 752 | 709 | 796 | \$30 |
| 2010 | Ech | 13 | 6 | 678 | 666 | 669 | 678 | 696 | 735 | 786 | 858 | 918 | 953 | 951 | 893 | 819 | 750 | 695 | 660 | 668 | 704 | 798 | 846 | 854 | 850 | 823 | 791 | 759 | \$28 |
| 2010 | Feb | 14 | 7 | 766 | 761 | 775 | 797 | 831 | 885 | 930 | 995 | 1007 | 955 | 863 | 789 | 726 | 666 | 630 | 613 | 614 | 649 | 732 | 764 | 768 | 749 | 719 | 683 | 747 | 546 |
| 2010 | Feb | 15 | 1 | 660 | 660 | 675 | 701 | 747 | 829 | 919 | 979 | 931 | 873 | 789 | 719 | 66X | 632 | 614 | 610 | 621 | 647 | 708 | 713 | 697 | 650 | 594 | 539 | 771 | 508 |
| 2010 | Feb | 16 | 2 | 505 | 495 | \$05 | 527 | 574 | 660 | 795 | 872 | 862 | 836 | 804 | 755 | 714 | 681 | 655 | 645 | 649 | 693 | 798 | 861 | 865 | 840 | 792 | 742 | 813 | 477 |
| 2010 | Feb | 17 | 3 | 713 | 710 | 722 | 739 | 781 | 878 | 999 | 1054 | L(NN) | 938 | 864 | 8356 | 755 | 712 | 682 | 673 | 678 | 718 | 812 | 859 | 859 | 829 | 778 | 724 | 808 | 546 |
| 2010 | Feb | 18 | 4 | 691 | 683 | 693 | 707 | 743 | 835 | 953 | 1012 | 961 | 887 | 845 | 782 | 730 | 686 | 653 | 631 | 633 | 662 | 755 | 8116 | 813 | 794 | 745 | 701 | 763 | 517 |
| 2010 | Feb | 19 | 5 | 666 | 657 | 660 | 671 | 702 | 767 | 884 | 942 | 926 | 880 | 811 | 743 | 691 | 652 | 625 | 611 | 614 | 637 | 700 | 722 | 711 | 682 | 642 | 594 | 739 | 502 |
| 2010 | Feb | 20 | 6 | 556 | 532 | - 524 | 521 | 534 | 571 | -620 | 665 | 691 | 666 | 634 | 606 | 581 | 562 | 552 | 546 | 547 | 561 | 602 | 625 | 605 | 579 | 545 | 509 | 670 | 454 |
| 2010 | Feb | 21 | 7 | 482 | 469 | 468 | 479 | 496 | \$26 | \$71 | 609 | 632 | 617 | 596 | 577 | .568 | 559 | 553 | 549 | 551 | 569 | 617 | 634 | 607 | .561 | 506 | 419 | 705 | 464 |
| 2010 | Feb | 22 | 1 | 404 | 379 | 370 | 370 | 385 | 436 | 531 | 579 | 593 | 602 | 612 | 620 | 621 | 623 | 614 | 612 | 614 | 621 | 666 | 681 | 650 | 597 | 528 | 465 | 743 | 465 |
| 2010 | Feb | 23 | 2 | 417 | 386 | 373 | 371 | 382 | 427 | 518 | 561 | 582 | 598 | 616 | 622 | 626 | 632 | 632 | 635 | 635 | 634 | 666 | 685 | 651 | - 599 | 531 | 461 | 725 | 471 |
| 2010 | Feb | 24 | 3 | 414 | 392 | 383 | 383 | 401 | 455 | 551 | 600 | 618 | 621 | 629 | 624 | 620 | 622 | 620 | 621 | 632 | 657 | 703 | 709 | 680 | - 640 | 585 | 530 | 725 | 479 |
| 2010 | Feb | 25 | 1 | 500 | 495 | 504 | 524 | 565 | 647 | 783 | 865 | 865 | 837 | 809 | 770 | 728 | 692 | 660 | 639 | 638 | 670 | 759 | 827 | 837 | 818 | 774 | 731 | 838 | 509 |
| 2010 | Feb | 26 | 5 | 708 | 713 | 728 | 751 | 797 | 891 | 992 | 1042 | 978 | 906 | 819 | 758 | 701 | 659 | 624 | 603 | 598 | 614 | 681 | 735 | 742 | 737 | 715 | 684 | 859 | 584 |
| 2010 | Feb | 27 | 6 | 661 | 653 | 655 | 655 | 664 | 692 | 731 | 769 | X(X) | 813 | 813 | 805 | 787 | 760 | 729 | 707 | 6.96 | 705 | 758 | 796 | 7987 | 270 | 736 | 698 | 731 | 494 |
| 2010 | Feb | 28 | 7 | 663 | 649 | 650 | 662 | 685 | 726 | 784 | 830 | 835 | 792 | 740 | 684 | 641 | 602 | 573 | 555 | 552 | \$73 | 647 | 706 | 703 | 682 | 647 | 605 | 759 | 529 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | - | | - | | | | | | | | | - | | | | | | | | | | | | | <u> </u> | |
| - | Carlos a | AVG | | 545 | 530 | 530 | 539 | 569 | 638 | 744 | 798 | 787 | 765 | 740 | 711 | 686 | 665 | 649 | 642 | 647 | 670 | 731 | 752 | 735 | 697 | 642 | 587 | 798 | 530 |
| | | MAX | 1 | 766 | 761 | 775 | 797 | 831 | 891 | 499 | 1054 | 1007 | 955 | 951 | 893 | 832 | 829 | 824 | 833 | 848 | 852 | 866 | 861 | 865 | 850 | 823 | 791 | 986 | |
| | | MIN | | 404 | 379 | 370 | 370 | 382 | 409 | 447 | 484 | \$40 | \$79 | 596 | \$77 | 568 | 559 | 552 | 546 | \$47 | \$61 | 6112 | 625 | 605 | 561 | 506 | 449 | | 370 |

[1] Average day excludes weekends and NERC holidays

The tables below provides 30 days of average of hourly load data for the ARP during the 2010 Summer season (May through September) and the month that most represented the 30 day average, which was August.

| | | _ | | - | | | | | Avera | ge 30 1 | Days o | t Load | Data D | uring | 2010 \$ | umno | er Sea | on | | | | | | - | | | | - | |
|----------------|---------|------------|--------|-----|-------|-------|-------|-------|-------|---------|--------|--------|--------|--------|---------|--------|---------|-------|-------|------|------|------|------|------|-------|------|-----|-------|------|
| 1110 | 1. | De | Day of | | | | | | 1.0 | | | - | Olser | wed Ho | urly Pe | eak Ca | quacity | (MNV) | | | 1 | | | 100 | | | | MAX | MIN |
| rear | Nonen | Day | Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | (MIW) | (MM |
| 2010 | Avg[1] | 1 | I | 657 | 610 | 578 | 561 | 559 | 587 | 645 | 689 | 754 | 830 | 911 | 976 | 1046 | 1091 | 1123 | 1134 | 1129 | 1112 | 1074 | 1029 | 1011 | 952 | 856 | 760 | 1134 | \$59 |
| 2010 | Ave [1] | 2 | 2 | 674 | 623 | 590 | 570 | 566 | 593 | 651 | 696 | 760 | 837 | 917 | 986 | 1047 | 1092 | 1116 | 1122 | 1122 | 1091 | 1046 | 997 | 977 | 924 | 837 | 743 | 1122 | \$66 |
| 2010 | Avg[1] | 3 | 3 | 670 | 622 | 588 | 568 | 564 | 589 | 650 | 694 | 760 | 836 | 914 | 977 | 1027 | 1071 | 1094 | 1108 | 1105 | 1076 | 1033 | 981 | 958 | 906 | 816 | 713 | 1108 | 564 |
| 2010 | Avg[1] | 4 | 4 | 646 | \$97 | 565 | 546 | \$43 | 569 | 628 | 673 | 741 | 821 | 901 | 971 | 1033 | 1079 | 1107 | 1107 | 1098 | 1063 | 1020 | 966 | 949 | 900 | 810 | 718 | 1107 | \$43 |
| 2010 | Avg[1] | 5 | 5 | 643 | 594 | 560 | 540 | 538 | 563 | 620 | 660 | -725 | 797 | 872 | 938 | 992 | 1033 | 1067 | 1085 | 1087 | 1061 | 1018 | 968 | 948 | 901 | 828 | 744 | 1087 | 538 |
| 2010 | Avg [1] | 6 | 6 | 673 | 621 | 583 | 559 | \$47 | 551 | 564 | 586 | 663 | 759 | 1846 | 915 | 969 | 1007 | 1025 | 1027 | 1019 | 1002 | 968 | 927 | 910 | 859 | 802 | 729 | 1027 | 547 |
| 2010 | Ave [4] | 7 | 7 | 664 | 618 | 581 | 357 | \$44 | 546 | -555 | \$73 | 646 | 727 | 800 | 856 | 902 | 935 | 951 | 952 | 942 | 922 | 890 | 856 | 842 | 8(19 | 750 | 682 | 952 | 544 |
| 2010 | Avg [1] | 8 | 1 | 619 | \$73 | 544 | \$29 | 529 | 559 | 622 | 672 | 740 | 812 | 876 | 930 | 971 | 1004 | 1033 | 1050 | 1054 | 1038 | 1006 | 947 | 928 | 888 | 800 | 705 | 1054 | 529 |
| 2010 | Avg[1] | 9 | 2 | 622 | 576 | 54X | 531 | 530 | 557 | 615 | 661 | 727 | 801 | 871 | 929 | 977 | 1018 | 1043 | 1049 | 1048 | 1026 | 986 | 942 | 922 | 879 | 792 | 702 | 1049 | 530 |
| 2010 | Ave [1] | 10 | 3 | 631 | 582 | 551 | 532 | 528 | 555 | 610 | 660 | 731 | 809 | 889 | 952 | 1000 | 1044 | 1068 | 1081 | 1083 | 1062 | 1013 | 967 | 943 | 894 | 806 | 713 | 1083 | 528 |
| 2010 | Avg[1] | 11 | 4 | 637 | 587 | 552 | 532 | \$27 | 551 | 605 | 648 | 717 | 798 | 880 | 951 | 1004 | 1054 | 1088 | 1107 | 1119 | 1104 | 1070 | 1019 | 991 | 937 | 843 | 747 | 1119 | 527 |
| 2010 | Avg[1] | 12 | 5 | 669 | 617 | 578 | 556 | 551 | 571 | 621 | 665 | 740 | 826 | 912 | 986 | 1042 | 1097 | 1124 | 1135 | 1135 | 1106 | 1065 | 1015 | 980 | 932 | 853 | 769 | 1135 | 551 |
| 2010 | Ave[1] | 13 | 6 | 696 | 642 | 601 | 573 | 560 | \$6t | 570 | 594 | 679 | 779 | 872 | 948 | 1010 | 1061 | 1088 | 1097 | 1101 | 1093 | 1056 | 1005 | 982 | 934 | 857 | 775 | 1101 | 560 |
| 2010 | Avg[1] | 14 | 7 | 704 | 650 | 610 | 582 | 567 | 563 | 568 | 589 | 675 | 778 | 868 | 939 | 1001 | 1048 | 1070 | 1078 | 1071 | 1048 | 1007 | 963 | 946 | 9(12 | 828 | 745 | 1078 | 561 |
| 2010 | Avg[1] | 15 | 1 | 672 | 623 | 591 | 573 | -\$70 | 595 | 651 | 696 | 766 | 850 | 930 | 999 | 1054 | 1095 | 1117 | 1122 | 1117 | 1092 | 1052 | 1017 | 1000 | 941 | 851 | 759 | 1122 | 570 |
| 2010 | Avg [1] | 16 | 2 | 681 | 633 | 599 | 578 | 574 | 598 | 655 | 702 | 775 | 859 | 943 | 1015 | 1079 | 1126 | 1154 | 1156 | 1[4] | 1111 | 1072 | 1024 | 1001 | 943 | 848 | 758 | 1156 | 574 |
| 2010 | Avg[1] | 17 | 3 | 683 | 630 | 595 | 575 | 569 | 589 | 645 | 689 | 759 | 844 | 932 | 1004 | 1064 | 1110 | 1136 | 1146 | 1132 | 1092 | 1040 | 997 | 973 | 917 | 832 | 741 | 1146 | 569 |
| 2010 | Avg []] | 18 | 4 | 669 | 620 | 587 | \$67 | 563 | 588 | 643 | 686 | 753 | 844 | 933 | 1003 | 1062 | 1102 | 1121 | 1116 | 1105 | 1072 | 1022 | 976 | 954 | 902 | 816 | 728 | 1121 | 563 |
| 2010 | Avg [1] | 19 | 5 | 656 | 605 | 571 | 549 | 544 | 568 | 620 | -666 | 740 | 829 | 919 | 991 | 1050 | 1089 | 1102 | 1103 | 1097 | 1067 | 1016 | 963 | 939 | 894 | 818 | 740 | 1103 | 544 |
| 2010 | Avell | 20 | 6 | 670 | 620 | 586 | \$62 | 551 | 554 | 365 | 589 | 675 | 773 | 863 | 940 | 995 | 1035 | 1066 | 1081 | 1086 | 1068 | 1021 | 964 | 937 | 892 | 820 | 741 | 1186 | 551 |
| 2010 | Avg[1] | 21 | 7 | 671 | 621 | 583 | 557 | 544 | \$43 | \$50 | \$73 | 658 | 756 | 846 | 917 | 974 | 1018 | 1038 | 1038 | 1030 | 1010 | 969 | 927 | 908 | 865 | 789 | 706 | 1038 | 543 |
| 2010 | Avg [1] | 22 | 1 | 637 | 590 | 560 | 544 | 543 | 572 | 630 | 677 | 742 | 818 | 904 | 975 | 1033 | 1081 | 1104 | 1108 | 1097 | 1060 | 1011 | 971 | 953 | 899 | .808 | 720 | 1108 | 543 |
| 2010 | Avg[1] | 23 | 2 | 648 | 641 | 571 | \$52 | 550 | 577 | 641 | 683 | 742 | 821 | 898 | 950 | 997 | 1036 | 1056 | 1058 | 1052 | 1034 | 1005 | 968 | 949 | 9(10) | 811 | 725 | 1058 | 550 |
| 2010 | Avg [1] | 24 | 3 | 643 | 591 | 570 | 552 | 551 | 578 | 637 | 683 | 743 | 815 | 889 | 948 | 1002 | 1052 | 1083 | 1100 | 1102 | 1087 | 1050 | 1009 | 979 | 930 | 840 | 745 | 1102 | 551 |
| 2010 | Avg[1] | 25 | 4 | 669 | 618 | 582 | 562 | 557 | 580 | 639 | 682 | 746 | 823 | 5116 | 973 | 1027 | 1071 | 1103 | 1120 | 1121 | 1099 | 1057 | 1017 | 988 | 938 | 849 | 756 | 1121 | 557 |
| 2010 | Avg [1] | 26 | 5 | 681 | 630 | 594 | 571 | 564 | 587 | 637 | 683 | 753 | 835 | 919 | 985 | 1039 | 1080 | 1096 | 10560 | 1075 | 1040 | 992 | 949 | 924 | 886 | 819 | 745 | 1096 | 564 |
| 2010 | Avg [1] | 27 | 6 | 679 | 632 | 598 | \$75 | \$65 | 571 | 583 | 607 | 685 | 775 | 860 | 924 | 975 | 1011 | 1035 | 1040 | 1037 | 1013 | 975 | 936 | 921 | 882 | 817 | 746 | 1040 | 565 |
| 2010 | Avg [1] | 28 | 7 | 679 | - 630 | 595 | - 573 | \$60 | 560 | 567 | 589 | 668 | 756 | 840 | 911 | 971 | 1014 | 1039 | 1046 | 1047 | 1025 | 984 | 951 | 931 | 888 | 815 | 736 | 1047 | 560 |
| 2010 | Avg[1] | 29 | 1 | 687 | 638 | (518) | 580 | \$75 | 600 | 656 | 699 | 769 | 858 | 949 | 1028 | 1089 | 1138 | 1154 | 1146 | 1134 | 1108 | 1064 | 1029 | 997 | 941 | 852 | 763 | 1154 | 575 |
| 2010 | Avg [1] | 30 | 2 | 688 | 642 | 608 | 588 | 587 | 614 | 671 | 714 | 767 | 835 | 905 | 967 | 1025 | 1073 | 1087 | 1079 | 1062 | 1053 | 1030 | 1005 | 984 | 923 | 833 | 752 | 1087 | 587 |
| - Ve | | AVG [2] | | 658 | 609 | 576 | 557 | 554 | 579 | 636 | 681 | 748 | 827 | 908 | 974 | 1030 | 1074 | 1099 | 1106 | 1101 | 1075 | 1033 | 989 | 966 | 915 | 828 | 738 | 1106 | 554 |
| | | MAX | 1 | 704 | 650 | 610 | 588 | 587 | 614 | 671 | 714 | 775 | 859 | 949 | 1028 | 1089 | 1138 | 1154 | 1156 | 1141 | 1112 | 1074 | 1029 | 1011 | 952 | 857 | 775 | 1156 | - |
| and the second | 1 | MIN | 1 | 619 | 573 | \$44 | 529 | 527 | 543 | 550 | 573 | 646 | 727 | SDO | 8.56 | 9612 | 935 | 951 | 952 | 942 | 922 | 890 | 856 | 842 | 81.19 | 750 | 682 | | 527 |

The average month is made up of the averages of May 20.
Average day excludes weekends and NERC holidays

| | | | | _ | | | _ | | | Ту | ical S | umniei | Mont | h for 2 | 010: / | August | | | | _ | | | _ | _ | | _ | _ | | _ |
|------|--------|-----|--------|----------|-----|------|------|-------|-----|------|--------|--------|-------|---------|--------|------------|--------|-------|------|-------|-------|------|------|------|-------|------|-----|------|------|
| | | | Day of | The same | S | - | | 01- | | | | - | Olser | ved Ho | urly P | eak Ca | macity | (MBV) | | | UP ES | | - | | - | 1-11 | | MAX | MIN |
| Year | Month | Day | Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | (MW) | ARV |
| 2010 | Aug | 1 | 7 | 742 | 692 | 656 | 627 | 612 | 613 | 617 | 630 | 713 | 819 | 922 | 1007 | 1069 | 1115 | 1114 | 1102 | 1081 | 1036 | 987 | 934 | 922 | 881 | 815 | 740 | 1115 | 612 |
| 2010 | Aug | 2 | 1 | 675 | 631 | 599 | 581 | 577 | 598 | 648 | 683 | 756 | 843 | 937 | 1029 | 1108 | 1173 | 1208 | 1214 | 1211 | 1205 | 1166 | 1110 | 1077 | 1014 | 916 | 825 | 1214 | 577 |
| 2010 | Aug | 3 | 2 | 742 | 686 | 649 | 626 | 620 | 638 | 685 | 720 | 788 | 883 | 967 | 1054 | 1130 | 1186 | 1218 | 1218 | 1219 | 1189 | 1124 | 1065 | 1039 | 990 | 9115 | SOS | 1219 | 620 |
| 2040 | Aug | 4 | 3 | 735 | 685 | 644 | 619 | 64.18 | 626 | 675 | 705 | 786 | 868 | 948 | 1026 | 1090 | 1144 | 1182 | 1208 | 1213 | 1195 | 1156 | 1094 | 1059 | 1012 | 919 | 817 | 1213 | 608 |
| 2010 | Aug | 5 | 4 | 736 | 681 | 643 | 618 | 608 | 625 | 670 | 705 | 789 | 880 | 969 | 1037 | 1097 | 1146 | 1180 | 1198 | 1189 | 1156 | 1115 | 1062 | 1040 | 996 | 906 | 811 | 1198 | 608 |
| 2010 | Aug | 6 | 5 | 730 | 675 | 637 | 613 | 608 | 626 | 665 | 697 | 789 | 887 | 985 | 1061 | 1114 | 1148 | 1178 | 1194 | 12(8) | 1165 | 1122 | 1071 | 1043 | 997 | 916 | 828 | 1200 | 6/18 |
| 2010 | Aug | 7 | 6 | 754 | 701 | 661 | 634 | 622 | 623 | 635 | 646 | 720 | 822 | 90K | 969 | 1011 | 1032 | 1022 | 1016 | 997 | 980 | 956 | 922 | 913 | 828 | 806 | 747 | 1032 | 622 |
| 2010 | Aug | 8 | 7 | 688 | 645 | 615 | 594 | 582 | 586 | 598 | 611 | 683 | 762 | 829 | 854 | 885 | 918 | 938 | 950 | 939 | 916 | 884 | 855 | 856 | 826 | 763 | 693 | 950 | 582 |
| 2010 | Aug | 9 | 1 | 636 | 592 | \$66 | -552 | 557 | 584 | 637 | 680 | 749 | 830 | 907 | 970 | 1020 | 1052 | 1075 | 1088 | 1083 | 1071 | 1036 | 991 | 965 | 928 | 846 | 759 | 1088 | 552 |
| 2010 | Aug | 10 | 2 | 687 | 637 | 606 | 588 | 585 | 606 | 655 | 696 | 768 | 844 | 905 | 954 | 986 | 1003 | 1032 | 1042 | 1043 | 1014 | 965 | 923 | 912 | 878 | 798 | 718 | 1043 | 585 |
| 2010 | Aug | 11 | 3 | 652 | 607 | 580 | 562 | 559 | 585 | 630 | 677 | 763 | 856 | 943 | 1019 | 1070 | 1105 | 1102 | 1125 | 1120 | 1082 | 1026 | 976 | 967 | 914 | 831 | 744 | 1125 | 559 |
| 2010 | Aug | 12 | 4 | 672 | 624 | 590 | 572 | 569 | 591 | 644 | 677 | 760 | 860 | 958 | 1042 | 1091 | 1124 | 1134 | 1145 | 1140 | 1113 | 1081 | 1033 | 1014 | 969 | 881 | 790 | 1145 | 569 |
| 2010 | Aug | 13 | 5 | 717 | 667 | 632 | 612 | 616 | 624 | 670 | 705 | 794 | 897 | 991 | 1056 | 1109 | 1149 | 1137 | 1115 | 1091 | 1039 | 996 | 952 | 942 | 908 | 843 | 769 | 1149 | 606 |
| 2010 | Aug | 14 | 6 | 704 | 658 | 624 | 601 | 591 | 595 | 610 | 629 | 719 | 826 | 921 | 997 | 1055 | 1082 | 1096 | 1093 | 1101 | 1095 | 1065 | 1018 | 1007 | 959 | 889 | 812 | 1101 | 591 |
| 2010 | Aug | 15 | 7 | 740 | 688 | 646 | 615 | 59%) | 596 | 605 | 617 | 7114 | 815 | 909 | 989 | 1053 | 1090 | 1103 | 1116 | 1107 | 1068 | 1024 | 984 | 979 | 933 | 858 | 775 | 1116 | 596 |
| 2010 | Agg | 16 | 1 | 706 | 653 | 619 | 600 | 598 | 620 | 676 | 710 | 783 | 882 | 982 | 1075 | 1148 | 1189 | 1210 | 1192 | 1158 | 1114 | 1076 | 1031 | 1026 | 969 | 879 | 788 | 1210 | \$98 |
| 2010 | Aug | 17 | 2 | 714 | 667 | 636 | 620 | 614 | 641 | 703 | 743 | 821 | 916 | 1009 | 1090 | 1158 | 1206 | 1237 | 1243 | 1232 | 1208 | 1170 | 1110 | 1073 | 1004 | 906 | 817 | 1243 | 614 |
| 2010 | Aug | 18 | 3 | 743 | 690 | 652 | 634 | 627 | 638 | 697 | 732 | 816 | 912 | 1011 | 1095 | 1165 | 1212 | 1240 | 1241 | 1233 | 1204 | 1147 | 1096 | 1063 | [(XX) | 908 | 818 | 1241 | 627 |
| 2010 | Aug | 19 | 4 | 741 | 690 | 657 | 636 | 632 | 655 | 710 | 748 | 830 | 931 | 1029 | 1109 | 1177 | 1226 | 1258 | 1263 | 1255 | 1222 | 1178 | 1104 | 1076 | 1(8)7 | 910 | 813 | 1263 | 632 |
| 2010 | Aug | 20 | 5 | 734 | 682 | 648 | 627 | 619 | 642 | 696 | 736 | 815 | 910 | 1006 | 1082 | 1150 | 1197 | 1198 | 1185 | 1166 | 1132 | 1074 | 1023 | 1008 | 959 | 861 | 784 | 1198 | 619 |
| 2010 | Aug | 21 | 6 | 711 | 660 | 624 | 597 | 586 | 390 | 61)5 | 623 | 709 | 811 | 916 | 999 | 1044 | 1070 | 1100 | 1115 | 1104 | 1065 | 1014 | 956 | 941 | 890 | 827 | 757 | 1115 | 586 |
| 2010 | Aug | 22 | 7 | 693 | 649 | 615 | 593 | 582 | 389 | 603 | 616 | 688 | 781 | 879 | 959 | 1019 | 1058 | 1085 | 1078 | 1142 | 1(8)4 | 958 | 918 | 405 | 854 | 773 | 699 | 1085 | 382 |
| 2010 | Aug | 23 | | 636 | 597 | 572 | 562 | 568 | 606 | 679 | 716 | 764 | 832 | 919 | - 988 | 1037 | 1057 | 1051 | 1039 | 1030 | 996 | -952 | 928 | 933 | 875 | 784 | 705 | 1057 | 562 |
| 2010 | Aug | 24 | 2 | 640 | 603 | 579 | 565 | 568 | 604 | 683 | 722 | 759 | 811 | 871 | 897 | 909 | 912 | 910 | 899 | 883 | 866 | 849 | 841 | 856 | 811 | 731 | 658 | 912 | 565 |
| 2010 | Aug | 25 | 3 | 557 | 499 | 530 | 529 | 531 | 567 | 651 | 694 | 731 | 777 | 825 | 865 | 919 | 980 | 1025 | 1043 | 1033 | 10879 | 978 | 945 | 942 | 889 | 799 | 707 | 1043 | 499 |
| 2010 | Aug | 26 | 4 | 638 | 596 | 569 | 554 | 553 | 582 | 658 | 693 | 730 | 795 | 874 | - 939 | 996 | 1050 | 1076 | 1087 | 1067 | 1023 | 986 | 953 | 950 | 888 | 798 | 709 | 1087 | 553 |
| 2010 | Aug | 27 | 5 | 636 | 591 | 564 | 547 | 544 | 574 | 637 | 672 | 722 | 7% | 867 | 937 | 990 | 1028 | 1056 | 1061 | 1060 | 1024 | 967 | 916 | 898 | 844 | 780 | 708 | 1061 | 544 |
| 2010 | Aug | 28 | 6 | 648 | 606 | 573 | 554 | 543 | 553 | 576 | 593 | 666 | 750 | 824 | 890 | 946 | . 990 | 1013 | 1021 | 1017 | 1000 | 959 | 915 | 917 | 870 | 806 | 737 | 1021 | 543 |
| 2010 | Aug | 29 | 7 | 674 | 628 | 598 | 578 | 568 | 571 | 587 | 600 | 660 | 740 | 806 | 865 | 908 | 937 | 962 | 972 | 978 | 961 | 927 | 896 | 898 | 848 | 769 | 691 | 978 | 568 |
| 2010 | Aug | 30 | 1 | 628 | 588 | 559 | 543 | 549 | 588 | 657 | 694 | 747 | 815 | 887 | 943 | 991 | 1023 | 1056 | 1070 | 1075 | 1047 | 1005 | 965 | .956 | 892 | 794 | 699 | 1075 | 543 |
| 2010 | Aug | 31 | 2 | 631 | 589 | 561 | 545 | 544 | 579 | 656 | 696 | 743 | 820 | 898 | 957 | 1002 | 1032 | 1059 | 1068 | 1078 | 1054 | 1014 | 974 | 971 | 907 | 813 | 723 | 1078 | 544 |
| | a sere | AVG | 1 | 681 | 633 | 604 | 587 | 584 | 609 | 667 | 705 | 773 | 857 | 940 | 1010 | 1066 | 1106 | 1128 | 1134 | 1126 | 1097 | 1054 | 1007 | 991 | 939 | 851 | 764 | 1134 | 584 |
| | 1 | MAX | | 754 | 701 | 661 | 636 | 632 | 655 | 710 | 748 | 830 | 931 | 1029 | 1109 | 1177 | 1226 | 1258 | 1263 | 1255 | 1222 | 1178 | 1110 | 1077 | 1014 | 919 | 828 | 1263 | |
| | | MIN | | 557 | 300 | 510 | \$20 | 531 | 553 | \$76 | 507 | 660 | 740 | NIN. | 854 | 885 | 912 | 910 | 899 | 883 | 866 | 849 | 841 | 856 | 811 | 731 | 658 | | 449 |

The tables and graphic have been provided electronically as sheet "3" in the attached "FMPA TYSP Supplemental Tables_2011.xls."



4. Please provide, on a system-wide basis, historical annual heating degree day (HDD) and cooling degree day (CDD) data for the period 2001 through 2010 and forecasted annual HDD and CDD data for the period 2011 through 2020. Describe how the Company derives system-wide temperature if more than one weather station is used. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Tem | perature | Data |
|-----|----------|------|
|-----|----------|------|

| | Year | HDD | CDD |
|------|------|------|------|
| | 2001 | 513 | 3348 |
| | 2002 | 614 | 3572 |
| | 2003 | 654 | 3550 |
| 12.5 | 2004 | 531 | 3447 |
| Ac | 2005 | 524 | 3424 |
| ua | 2006 | 433 | 3545 |
| | 2007 | 393 | 3641 |
| | 2008 | 468 | 3362 |
| | 2009 | 591 | 3616 |
| | 2010 | 1196 | 3361 |
| | 2011 | 580 | 3428 |
| | 2012 | 580 | 3428 |
| | 2013 | 580 | 3428 |
| - | 2014 | 580 | 3428 |
| roj | 2015 | 580 | 3428 |
| octe | 2016 | 580 | 3428 |
| - | 2017 | 580 | 3428 |
| 1 | 2018 | 580 | 3428 |
| | 2019 | 580 | 3428 |
| | 2020 | 580 | 3428 |

FMPA forecasts demand and energy data for each municipal electric utility participating in the ARP (ARP Participant) using local temperature data. Data reported above is from the Orlando International Airport weather station, which may be used as an indicator of weather conditions over the geographically diverse service area of the ARP.

The table has been provided electronically as sheet "4" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

5. Please provide the following data to support Schedule 4 of the Company's Ten-Year Site Plan: the

12 monthly peak demands for the years 2008, 2009, and 2010; the date when these monthly peaks

occurred; and, the temperature at the time of these monthly peaks. Describe how the Company derives system-wide temperature if more than one weather station is used. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| - | 1000 | Peak Demand | | Day of | | Temperature |
|------|-------|-------------|------------|--------|------|-------------|
| Year | Month | (MW) | Date | Week | Hour | (F) |
| | 1 | 1,330.191 | 1/3/2008 | Thu | 09 | 54/31 |
| | 2 | 1,051.653 | 2/28/2008 | Thu | 08 | 60/37 |
| | 3 | 1,012.305 | 3/19/2008 | Wed | 17 | 86/63 |
| | 4 | 1,078.182 | 4/4/2008 | Fri | 17 | 88/67 |
| | 5 | 1,285.897 | 5/21/2008 | Wed | 17 | 93/71 |
| 8 | 6 | 1,405.848 | 6/5/2008 | Thu | [7 | 93/72 |
| 200 | 7 | 1,405.359 | 7/21/2008 | Mon | 16 | 95/74 |
| | 8 | 1,450.149 | 8/7/2008 | Thu | 16 | 95/76 |
| | 9 | 1,318.513 | 9/15/2008 | Mon | 16 | 92/74 |
| | 10 | 1,147.422 | 10/1/2008 | Wed | 16 | 89/66 |
| | 11 | 1,008.631 | 11/14/2008 | Fri | 16 | 88/69 |
| | 12 | 1,021.878 | 12/3/2008 | Wed | 08 | 69/39 |
| 24 | 1 | 1,406.274 | 1/22/2009 | Thu | 08 | 60/29 |
| | 2 | 1,418.504 | 2/5/2009 | Thu | 08 | 52/30 |
| | 3 | 1,059.151 | 3/3/2009 | Tue | 08 | 63/39 |
| | 4 | 1,030.269 | 4/24/2009 | Fri | 17 | 91/60 |
| | 5 | 1,270.851 | 5/11/2009 | Mon | 17 | 95/66 |
| 3 | 6 | 1,482.740 | 6/22/2009 | Mon | 16 | 97/81 |
| 20 | 7 | 1,351.545 | 7/23/2009 | Thu | 17 | 93/74 |
| | 8 | 1,381.687 | 8/11/2009 | Tue | 17 | 94/75 |
| | 9 | 1,293.857 | 9/25/2009 | Fri | 16 | 92/75 |
| | 10 | 1,325.850 | 10/8/2009 | Thu | 17 | 95/72 |
| | 11 | 953.694 | 11/1/2009 | Sun | 16 | 86/62 |
| | 12 | 974.888 | 12/29/2009 | Tue | 09 | 68/46 |
| | 1 | 1,412.038 | 01/11/2010 | Mon | 08 | 46/27 |
| | 2 | 1,053.729 | 02/17/2010 | Wed | 08 | 58/39 |
| | 3 | 999.691 | 03/05/2010 | Fri | 08 | 62/37 |
| | 4 | 839.747 | 04/23/2010 | Fri | 17 | 86/61 |
| | 5 | 1,087.256 | 05/20/2010 | Thu | 17 | 91/70 |
| 10 | 6 | 1,272.051 | 06/15/2010 | Tue | 15 | 98/75 |
| 20 | 7 | 1,255.058 | 07/27/2010 | Tue | 16 | 98/78 |
| | 8 | 1,262.994 | 08/19/2010 | Thu | 16 | 95/76 |
| | 9 | 1,170.919 | 09/10/2010 | Fri | 16 | 93/77 |
| | 10 | 1,048.684 | 10/27/2010 | Wed | 17 | 91/70 |
| | 11 | 844.142 | 11/01/2010 | Mon | 17 | 85/61 |
| | 12 | 1,258.264 | 12/14/2010 | Tue | 08 | 49/28 |

Historic Monthly Peaks

Temperature data shown above represents daily high and low temperatures recorded at the Orlando International Airport weather station. FMPA does not currently collect hourly

temperature data. FMPA forecasts demand and energy data for each ARP Participant using the Orlando temperature data as representative of weather conditions over the geographically diverse service area of the ARP.

The table has been provided electronically as sheet "5" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

6. Please discuss any recent trends in customer growth, by customer type (residential, industrial & commercial, etc), and as a whole. Please explain the nature or reason for these trends, and identify what types of customers are most affected by these trends. (For example, is a decline in customers a loss of temporary construction meters or a decline in population?)

Many ARP Participants have experienced declines across most customer classes. These trends have been driven mainly by the national and local economic downturn, the housing and credit crises, a downturn in tourism, and higher electricity prices. Residential average use has decreased significantly over the last few years primarily as a result of a surge in still-connected vacancies and "under-occupied" homes (long- and short-term rentals, vacation homes, etc.). Residential customer counts have flattened or have declined over the last couple of years as a result of vacant homes that are no longer connected.

7. Please discuss any impacts of "smart" or digital meter installations on forecasting sales and net energy for load. Please explain the nature or reason for these trends, and identify what types of customers are most affected by these trends. (For example, are increased sales due to more accurate measurement of low-load conditions?)

Certain of the ARP Participants have installed or are currently installing "smart" or digital meters on portions of their systems. As these efforts are either in the early deployment or implementation phases, FMPA has assumed zero impact on sales and net energy for load at this time and will reconsider this after further deployment of ARP Participant programs.

RENEWABLE GENERATION

8. Please provide the estimated total capacity of all renewable resources the utility owns or purchases as of January 1, 2011. Include in this value the sum of all utility-owned, and purchased power contracts (firm and non-firm), and purchases from as-available energy producers (net-metering, self-generators, etc.). Please also include the estimated total capacity of all renewable resources (firm and non-firm) the utility is anticipated to own or purchase as of the end of the planning period in 2020.

| Fuel Type | Renewabl | e Resource ty (MW) |
|-----------------------|----------|-----------------------|
| | Existing | Planned |
| Solar | 0.544 | 0.544 |
| Wind | | |
| Biomass | 20 [1] | 20 [1] |
| Municipal Solid Waste | | |
| Waste Heat | | |
| Landfill Gas | NA [2] | NA [2] |
| Hydro | | |
| Total | | |

- [1] Biomass Plant US Sugar has 3 generators. The first generator was installed in September 2004 (14 MW), the second, in November 2006 (20 MW) and the third in 2007 (14 MW) for a total of 48 MW on-site generation. The facility uses 45MW in-house which leaves 3MW available for the market on-peak. There is a 20 MW transformer at the site which limits the total amount of generation available to sell to the grid to a maximum of 20 MW at any time. The biomass facility is a non-firm resource and energy is received on an "As Available" basis.
- [2] Not Available the All-Requirements Project's 21.42% ownership share of the Stanton Energy Center Units 1 & 2 which burns land fill gas as a supplemental fuel an on an "As Available" basis. Capacity from this resource is accounted for in the overall capacity of the Stanton Energy Center.

The table has been provided electronically as sheet "8" in the attached "FMPA TYSP Supplemental Tables 2011.xls."

9. Please provide a description of each existing utility-owned renewable generation resource and each renewable purchased power agreement as of January 1, 2011. For both utility-owned and purchased resources, please divide them into Firm and Non-Firm categories as shown below. Please also include those renewable resources which provide fuel to conventional facilities, if applicable, with estimates of their capacity and energy contributions. As part of this response, please include the description of the unit's generator type, fuel type, commercial in-service date, seasonal net capacity (even if not considered firm capacity), annual energy generation. For

purchased power agreements, also provide the contract start and end dates. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

Existing Renewables as of January 1, 2011

Utility-Owned Firm Renewable Resources

| Facility Name | Unit Type | Fuel Type | Commercial In-Service Date | Net C (k | apacity W) | Annual Generation | Capacity Factor |
|------------------|--------------|--------------|----------------------------------|-------------|---------------|----------------------|--------------------|
| - | - | - | (MM/YYYY) | Sum | Win | (MWh) | (%) |
| N/A | | | | | | | |
| | | | | | | | |

Utility-Owned Non-Firm Renewable Resources

| Facility Name | Unit Type | Fuel Type | Commercial In-Service Date | Net C: (k) | apacity W) | Annual Generation | Capacity Factor |
|-------------------------------------|--------------|---|-------------------------------|---------------|---------------|----------------------|--------------------|
| | | | (MM/YYYY) | Sum | Win | (MWh) | (%) |
| Orange County Landfill [1] | ST | LFG - Methane gas is used as a supplemental fuel source at the Stanton Energy Center | 04/1998 | [1] | [1] | 12,598 | N/A |
| NOAA Discovery Center [2] | PV | SUN - | 12/2009 | 30 | 30 | 47.361 | 18% |

[1] See note I in question 8

[2] The NOAA Discovery Center is a joint partnership between the National Oceanic and Atmospheric Administration (NOAA) and FMPA. FMPA receives 62% of the energy generated from the solar PV system.

Firm Renewable Purchased Power Agreements

| Facility Name | Unit Type | Fuel Type | Unit Commercial In-Service Date | Net C: (k) | apacity W) | Annual Generation | Capacity Factor | Contract Start Date | Contract End Date |
|------------------|--------------|--------------|--|---------------|---------------|----------------------|--------------------|---------------------------|-------------------------|
| - | - | | (MM/YYYY) | Sum | Win | (MWh) | | Line Land | (%) |
| N/A | | | | | | _ | | | |
| | | | | | | | | | |

Non-Firm Renewable Purchased Power Agreements

| Facility Name | Unit Type | Fuel Type | Unit Commercial In-Service Date | Net Ca | apacity W) | Annual Generation | Capacity Factor | Contract Start Date | Contract End Date |
|-------------------|--------------|--------------|------------------------------------|--------|---------------|----------------------|--------------------|------------------------|--|
| - | - | - | (MM/YYYY) | Sum[1] | Win [1] | (MWh) | (%) | | |
| US Sugar Corp. | ST | AB | 09/2004 | 20,000 | 20,000 | 15,800 | 9.0% [2] | 04/1990 | On-going with 90 days cancellation notice |

[1] US Sugar has 3 generators. The first generator was installed in September 2004 (14 MW), the second, in November 2006 (20 MW) and the third in 2007 (14 MW) for a total of 48 MW on-site generation. The facility uses 45MW in-house which leaves 3MW available for the market on-peak. There is a 20 MW transformer at the site which limits the total amount of generation available to sell to the grid to a maximum of 20 MW.

[2] The 9.0% capacity factor is based off a maximum capacity of 20MW.

The above tables have been provided electronically as sheet "9" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

10. Please provide a description of each existing utility-owned renewable generation resource and each renewable purchased power agreement planned during the 2011 through 2020 period. For both utility-owned and purchased resources, please divide them into Firm and Non-Firm categories as shown below. Please also include those renewable resources which provide fuel to conventional facilities, if applicable, with estimates of their capacity and energy contributions. As part of this response, please include the description of the unit's generator type, fuel type, commercial inservice date, seasonal net capacity (even if not considered firm capacity), annual energy generation. For purchased power agreements, also provide the contract start and end dates. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

Planned Renewables for 2011 through 2020

Utility-Owned Firm Renewable Resources

| Unit Type | Fuel Type | In-Service Date | Net C. (k | apacity W) | Annual Generation | Capacity Factor |
|--------------|--------------|------------------------|--|---|---|--|
| - | - | (MM/YYYY) | Sum | Win | (MWh) | (%) |
| | | | | | | |
| | Unit Type | Unit Fuel Type Type | Unit Fuel Type Type Commercial In-Service Date (MM/YYYY) | Unit Type Fuel Type Commercial In-Service Date Net C. (k - - (MM/YYYY) Sum | Unit Type Fuel Type Commercial In-Service Date Net Capacity (kW) - - (MM/YYYY) Sum Win | Unit Type Fuel Type Commercial In-Service Date Net Capacity (kW) Annual Generation - - (MM/YYYY) Sum Win (MWh) |

Utility-Owned Non-Firm Renewable Resources

| Facility Name | Unit Type | Fuel Type | Commercial In-Service Date | Net C: (k | apacity W) | Annual Generation | Capacity Factor |
|------------------|--------------|--------------|----------------------------------|--------------|---------------|----------------------|--------------------|
| | | - | (MM/YYYY) | Sum | Win | (MWh) | (%) |
| N/A | | | | | | | |

Firm Renewable Purchased Power Agreements

| Facility Name | Unit Type | Fuel Type | Unit Commercial In-Service Date | Net C: (k | apacity W) | Annual Generation | Capacity Factor | Contract Start Date | Contract End Date |
|------------------|--------------|--------------|--|--------------|---------------|----------------------|--------------------|---------------------------|-------------------------|
| | - | 1227 | (MM/YYYY) | Sum | Win | (MWh) | | | (%) |
| N/A | | | | | | | | | |
| | | | | | | | | | |

Non-Firm Renewable Purchased Power Agreements

| Facility Name | Unit Type | Fuel Type | Unit Commercial In-Service Date | Net Ci (k | apacity W) | Annual Generation | Capacity Factor | Contract Start Date | Contract End Date |
|------------------|--------------|--------------|--|--------------|---------------|----------------------|--------------------|---------------------------|-------------------------|
| - | - | - | (MM/YYYY) | Sum | Win | (MWh) | | (%) | (%) |
| N/A | | | | | | | | | |
| | | | | | | | | | |

11. Please refer to the list of planned utility-owned renewable resource additions with an in-service date for the renewable generator during the 2011 through 2020 period outlined above. Please discuss the current status of each project.

Not Applicable

12. Please refer to the list of existing or planned renewable PPAs with an in-service date for the renewable generator during the 2011 through 2020 period outlined above. Please discuss the current status of each project.

Not Applicable

13. Please provide a description of each renewable facility in the company's service territory that it does not currently have a PPA with, including self-service facilities. As part of this response, please include the description of the unit's location, generator type, fuel type, commercial in-service date, seasonal net capacity (even if not considered firm capacity), annual energy generation. Please exclude from this response small customer-owned renewable resources, such as rooftop PV, which are more appropriately included in the following question. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

| FacilityUnitFuelNameTypeType | | Commercial In-Service Date | Net Capacity (kW) | | Annual Generation | Capacity Factor | |
|------------------------------|--|----------------------------------|----------------------|-----|----------------------|--------------------|-----|
| - | | - | (MM/YYYY) | Sum | Win | (MWh) | (%) |

The All-Requirements Project is a wholesale power supply project and as such, does not have a service territory. FMPA does not collect this information on behalf of the ARP Participants.

14. Please provide the number of customer-owned renewable resources within the Company's service territory. Please organize by resource type, and include total estimated installed capacity and annual output. Please exclude from this response any customer-owned renewable resources already accounted for under PPAs or other sources. If renewable energy types beyond those listed were utilized, please include an additional row and a description of the renewable fuel and generator. For non-electricity generating renewable energy systems, such as geothermal cooling and solar hot water heaters, please use kilowatt-equivalent and kilowatt-hour-equivalent units. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Customer Class | Renewable Type | # of Connections | Installed Capacity | Annual Output |
|----------------|-----------------------------|------------------|--------------------|---------------|
| | | | (kW) | (kWh) |
| Residential | Solar Photovoltaic | 80 | 446 | 221,073 |
| Residential | Solar Thermal Water Heating | | | |
| Residential | Geothermal Heat Pump | | | |
| Residential | Wind Turbine | | | |
| Residential | Other (Describe) | | | |
| Commercial | Solar Photovoltaic | 5 | 98 | 31,935 |
| Commercial | Solar Thermal Water Heating | | | |
| Commercial | Geothermal Heat Pump | | | |
| Commercial | Wind Turbine | | | |
| Commercial | Other (Describe) | | | |

The ARP provides wholesale power to the ARP Participants. As a power supply project, the ARP does not have a service territory. However, FMPA and ARP Participants, through the ARP Net

Metering Policy, do sponsor a net metering program for ARP Participants' customer-owned renewable generation. Figures shown above for number of installations and installed capacity are based on the net metering program as of December 31, 2010, and annual output is the recorded metered energy sent to the grid in the calendar year 2010.

The above table has been provided electronically as sheet "14" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

15. Please provide the annual output for the company's renewable resources (owned and purchased through PPA), retail sales, and the net energy for load for the period 2010 through 2020. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Annual O | utput | Actual | 1000 | 1 Same | Le pla | | Proje | ected | | | 1 | |
|--------------|---------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| (GWI | 1) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| | Utility | 13 | 21 | 20 | 18 | 16 | 15 | 14 | 13 | 12 | [] | 11 |
| Ceneration | PPA | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Generation | Total | 29 | 37 | 36 | 34 | 32 | 31 | 30 | 29 | 28 | 27 | 27 |
| Retail Sal | es [1] | n/a | | | | | | | | | | |
| Net Energy f | or Load | 6,299 | 6,409 | 6,593 | 6,771 | 6,495 | 6,665 | 6,705 | 6,866 | 7,021 | 7,180 | 7,341 |

[1] The All-Requirements Project (ARP) provides wholesale power to the ARP Participants and does not make retail sales.

The above table has been provided electronically as sheet "15" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

16. Provide, on a system-wide basis, the historical annual average as-available energy rate in the Company's service territory for the period 2001 through 2010. Also, provide the forecasted annual average as-available energy rate in the Company's service territory for the period 2011 through 2020. Please use the Consumer Price Index to calculate real as-available energy rates. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Year | As-Availa (S/N | able Energy (IWh) | CPI |
|------|-------------------|----------------------|-----|
| | Real | Nominal | |
| 2010 | | | |
| 2011 | | | |
| 2012 | | | |
| 2013 | | | |
| 2014 | | | |
| 2015 | | | |
| 2016 | | | |
| 2017 | | | |
| 2018 | | | |
| 2019 | | | |
| 2020 | | | |

The All Requirements Project does not have and does not forecast an as-available energy rate.

17. Please discuss any studies conducted or planned regarding the use combinations of renewable and fossil fuels in existing or future fossil units. What potential does the Company identify in this area?

The ARP is currently generating renewable energy through the combustion of landfill gas at the Stanton Energy Center Units 1 and 2 as a supplemental fuel to coal. Past studies have indicated that this is viable fuel use combination for the Stanton coal-fired units. No new combined renewable/fossil fuel use studies are planned at this time.

18. Please discuss any planned renewable generation or renewable purchased power agreements within the past 5 years that did not materialize. What was the primary reason these generation plans or purchased power contracts were not realized? What, if any, were the secondary reasons?

On June 29, 2007 FMPA issued a Request for Proposals as an invitation to qualified companies to submit proposals for the supply of renewable capacity and energy. Three bids were received, including: i) a 58 MW summer rated biomass circulating fluidized bed (CFB) plant proposed to burn waste wood and other materials including recycled pallets and paper derived fuel, (ii) 10 MW of roof-mounted photovoltaic systems, and (iii) a 1 MW to 3 MW centralized PV system. In all three cases the levelized costs for the three renewable alternatives were projected to be significantly higher that FMPA's avoided costs based on a 2007 study report. FMPA explored different pricing arrangements with each developer, however, the projects were deemed not to be cost effective for the All-Requirements Project.

In 2007, FMPA, as agent for the ARP issued a request for proposals for solar photovoltaic (PV) energy supply with a goal of implementing 10 MW. FMPA entered into a Letter of Intent with one vendor in March 2008, but this agreement was cancelled in November 200 due to the vendor's continued unresponsiveness to FMPA. In early 2009, FMPA conducted an evaluation of six solar integrators to identify a partner for a potential 10 MW solar PV project. In June 2009, the ARP selected a vendor for the project; however the project has been put on hold due to the potential cost impacts of the project at this time.

FMPA also considered a biomass project which used heat from combustion of a mixture of horse manure (or "muck") and urban woody waste in a combined cycle to produce steam and generate electricity. The developer eventually decided not to pursue the power cycle portion of the plant, so discussions were discontinued

19. Please discuss whether the company purchases or sells Renewable Energy Credits. As part of this response, please discuss whether the company offers the sale of Renewable Energy Credits to its customers through a green pricing or similar program.

FMPA has not entered into any contracts to purchase or sell RECs. As a wholesale power project, the All-Requirements Project does not offer green pricing programs to retail customers.

TRADITIONAL GENERATION

20. Please provide the cumulative present worth revenue requirement of the Company's Base Case for the 2011 Ten-Year Site Plan. If available, please provide the cumulative present worth revenue requirement for any sensitivities conducted of the Company's generation expansion plan.

The cumulative present worth revenue requirements (CPWRR) over the period 2011-2020 for the Base Case were approximately \$4.5 billion.

21. Please illustrate what the Company's generation expansion plan would be as a result of sensitivities to the base case demand. Include impacts on unit in-service dates for any possible delays, cancellations, accelerated completion, or new additions as a result.

FMPA's current base case capacity expansion plan does not require any additional resources until the year 2020 where it will require an additional 12 MW to maintain a summer season reserve margin of 18%. In FMPA's high load (severe weather) scenario, 13 MWs of additional resource capacities would be required in 2018, 30 MW more in 2019 and another 5MW in 2020 for a cumulative total of 48 MW in order to maintain the 18% summer season reserve margin. It is anticipated that the need for additional resources will be met either through joint participation agreements in new resource projects, or through purchase power agreements with other generators.

22. Please complete the following table detailing planned unit additions, including information on capacity and in-service dates. Please include only planned conventional units with an in-service date past January 1, 2011, and including nuclear units, nuclear unit uprates, combustion turbines, and combined-cycle units. For each planned unit, provide the date of the Commission's Determination of Need and Power Plant Siting Act certification (if applicable), and the anticipated in-service date.

| | Cummer | Certification Da | tes (if Applicable) | |
|-------------------------|----------|---------------------|---------------------|-----------------|
| Generating Unit Name | Capacity | Need Approved | PPSA Certified | In-Service Date |
| | (MW) | (Commission) | | |
| | Nuclea | ar Unit Additions / | Uprates | |
| Crystal River 3 /1/ | 1 | [1] | [1] | 05/2011 |
| St. Lucie 2 /1/ | 6 | | [1] | 10/2012 |
| Crystal River 3 [1] | 7 | [1] | [1] | 05/2013 |
| | Combus | stion Turbine Unit | Additions | |
| N/A | | | | |

Planned Unit Additions for 2011 through 2020

| and the second se | | | and the second se |
|---|-------|--------------------------|---|
| Cane Island Unit 4 | 300 | 8-Aug-08 | May, 2011 |
| | Steam | n Turbine Unit Additions | |

[1] Both St. Lucie #2 and Crystal River #3 will be receiving uprates in the 2011-2013 timeframe. Increases shown are FMPA's ARP share of the uprates. Additional details should be reflected in the responses from their respective unit operators: FPL and PEF.

The above table has been provided electronically as sheet "22" in the attached "FMPA TYSP Supplemental Tables 2011.xls."

23. For each of the generating units contained in the Company's Ten-Year Site Plan, please discuss the "drop dead" date for a decision on whether or not to construct each unit. Provide a time line for the construction of each unit, including regulatory approval, and final decision point.

The ARP currently has only one generating unit planned in the ten-year horizon. Construction of Cane Island Unit 4 (CI4), a 300 MW combined cycle, began in the spring of 2009, prior to the current ten year planning period, and it is expected to be commercial in May 2011. As such, the "drop dead" date for deciding whether or not to construct CI4 has already passed. A typical construction schedule for a combined cycle unit is shown below.



24. Please complete the following table detailing unit specific information on capacity and fuel consumption for 2010. For each unit on the Company's system, provide the following data based upon historic data from 2010: the unit's capacity; annual generation; resulting capacity factor; estimated annual availability factor; unit average heat rate; quantity of fuel burned; average cost of fuel; and resulting average energy cost for the unit's production. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Plant | Unit# | Unit Type | Fuel Type | Nameplate | Net Ca | pacity [2] | Annual | Capacity | Availability | In-Service |
|-----------------------|----------|-----------|-----------|-----------|--------|------------|----------------|------------|--------------|------------|
| | | | | Capacity | () | (W) | Generation [3] | Factor [3] | Factor [3] | Date |
| | Too Mile | | | (MW) | Sum | Win | (MWh) | (%) | (%) | R. C. M |
| Crystal River | 3 | NP | UR | [4] | [4] | [4] | [4] | [4] | [4] | 03/1977 |
| St. Lucie | 2 | NP | UR | [5] | [5] | [5] | [5] | [5] | [5] | 08 1983 |
| Stanton Energy Center | 1 | ST | BIT | [6] | [6] | [6] | [6] | [6] | [6] | 07 1987 |
| Stanton Energy Center | 2 | ST | BIT | [6] | [6] | [6] | [6] | [6] | [6] | 06 1996 |
| Stanton Energy Center | A | CC | NG | [8] | [8] | [8] | [8] | [8] | [8] | 10/2003 |
| Indian River | CT A | GT | NG | [6] | [6] | [6] | [6] | [6] | [6] | 06 1989 |
| Indian River | CT B | GT | NG | [6] | [6] | [6] | [6] | [6] | [6] | 07 1989 |
| Indian River | CT C | GT | NG | [6] | [6] | [6] | [6] | [6] | [6] | 08 1992 |
| Indian River | CT D | GT | NĞ | [6] | [6] | [6] | [6] | [6] | [6] | 10/1992 |
| Cane Island | 1 | GT | NG | 40 | 34 | 36 | 9,474 | 3.0% | 91% | 01 1995 |
| Cane Island | 2 | CC | NG | 122 | 108 | 112 | 165.202 | 17.9% | 88% | 06 1995 |
| Cane Island | 3 | CC | NG | 280 | 240 | 250 | 1.264.033 | 62.8% | 92% | 01 2002 |
| Stock Island | CT 2 | GT | DFO | 21 | 15 | 15 | 638.414 | 0.5% | 94% | 06 1999 |
| Stock Island | CT 3 | GT | DFO | 21 | 15 | 15 | 609.956 | 0.4% | 97% | 06/1999 |
| Stock Island | GT 4 | GT | DFO | 61 | 45 | 45 | 3163.649 | 0.8% | 96% | 06/2006 |
| Treasure Coast | 1 | CC | NG | 315 | 300 | 310 | 1,705,994 | 62.0% | 91% | 05 2008 |
| Hansel Plant | 21 | CT | NG | | 28 | 34 | | | | 02 1983 |
| Hansel Plant | 22 | CA | WH | 54 | 8 | 5 | 13,770 | 4.3% | 99% | 11/1983 |
| Hansel Plant | 23 | CA | WH | 1 1 | 8 | 5 | | | | 11 1983 |
| Tom G. Smith | GT-1 | GT | DFO | 31 | 26 | 27 | 62 | 0.0% | 38% | 12/1976 |
| Tom G. Smith | GT-2 | СТ | NG | 20 | 20 | 21 | 14 670 | 7 10/ | 010/ | 03 1978 |
| Tom G. Smith | S-5 | CA | WH | 10 | 8 | 9 | 14.079 | 7.170 | 0170 | 03.1978 |
| Tom G. Smith | MUI | IC | DFO | | 2 | 2 | 86 | 0.5% | 100% | 12 1965 |
| Tom G. Smith | M U2 | IC | DFO | 1 1 | 2 | 2 | 87 | 0.5% | 99% | 12 1965 |
| Tom G. Smith | M U3 | IC | DFO | 10 | 2 | 2 | 89 | 0.5% | 100% | 12 1965 |
| Tom G. Smith | MU4 | IC | DFO | 1 1 | 2 | 2 | 9 | 0.1% | 65% | 12 1965 |
| Tom G. Smith | MU5 | IC | DFO | 1 1 | 2 | 2 | 86 | 0.5% | 100% | 12 1965 |
| Tom G. Smith | S-3 | ST | DFO | 27 | 24 | 25 | 3,864 | 1.8% | 92% | 11 1967 |
| Stock Island | CT I | GT | DFO | 20 | 18 | 18 | 1.856 | 1 3% | 95% | 11 1978 |
| Stock Island | MSDI | IC | DFO | 9 | 6 | 6 | 1,599 | 2.3% | 100% | 06 1991 |
| Stock Island | M SD2 | IC | DFO | 9 | 7 | 7 | 2,238 | 3.2% | 100% | 09/1991 |

[1] For those generating units wholly owned by FMPA as agent for the All-Requirements Power Supply Project or by ARP Participants.

[2] Base on 2010 net capacity seasonal ratings reported in FMPA's 2011 Ten-Year Site Plan

[3] Information reported for Fiscal Year 2010 (October 1, 2009 - September 30, 2010).

[4] Historical operating data for this unit is available from Progress Energy Florida

[5] Historical operating data for this unit is available from Florida Power and Light

[6] Historical operating data for this unit is available from Orlando Utilities Commission

[7] Information is not available

[8] Historical opterating data for this unit is available from Southern Company

| Plant | Unit # | Fuel Type | Heat Rate [1] | Total Fuel Burned | Total Fuel Cost | Unit Fuel Cost | |
|-----------------------|--------|--------------|------------------|----------------------|--------------------|----------------|---------|
| | | | (BTU/kWh) | (MMBTU) | (\$000) | (\$/MMBTU) | (c/kWh) |
| Crystal River | 3 | UR | 10680 | [2] | [2] | [2] | [2] |
| St. Lucie | 2 | UR | 12780 | [3] | [3] | [3] | [3] |
| Stanton Energy Center | 1 | BIT | 10391 | [4] | [4] | [4] | [4] |
| Stanton Energy Center | 2 | BIT | 9550 | [4] | [4] | [4] | [4] |
| Stanton Energy Center | A | NG | 7270 | [4] | [4] | [4] | [4] |
| Indian River | CT A | NG | 13620 | [4] | [4] | [4] | [4] |
| Indian River | CT B | NG | 14020 | [4] | [4] | [4] | [4] |
| Indian River | CT C | NG | 12780 | [4] | [4] | [4] | [4] |
| Indian River | CT D | NG | 13040 | [4] | [4] | [4] | [4] |
| Cane Island | 1 | NG | 10470 | [5] | [5] | [5] | [5] |
| Cane Island | 2 | NG | 9320 | [5] | [5] | [5] | [5] |
| Cane Island | 3 | NG | 8007 | [5] | [5] | [5] | [5] |
| Stock Island | CT 2 | DFO | 15270 | [5] | [5] | [5] | [5] |
| Stock Island | CT 3 | DFO | 15290 | [5] | [5] | [5] | [5] |
| Stock Island | GT 4 | DFO | 10500 | [5] | [5] | [5] | [5] |
| Treasure Coast | 1 | NG | 7347 | [5] | [5] | [5] | [5] |
| Hansel Plant | 21 | NG | | [5] | [5] | [5] | [5] |
| Hansel Plant | 22 | WH | 10680 | [5] | [5] | [5] | [5] |
| Hansel Plant | 23 | WH | | [5] | [5] | [5] | [5] |
| Tom G. Smith | GT-1 | DFO | 0 | [5] | [5] | [5] | [5] |
| Tom G. Smith | GT-2 | NG | 10022 | [5] | [5] | [5] | [5] |
| Tom G. Smith | S-5 | WH | - 10923 | [5] | [5] | [5] | [5] |
| Tom G. Smith | MUI | DFO | 10500 | [5] | [5] | [5] | [5] |
| Tom G. Smith | MU2 | DFO | 10500 | [5] | [5] | [5] | [5] |
| Tom G. Smith | MU3 | DFO | 10500 | [5] | [5] | [5] | [5] |
| Tom G. Smith | MU4 | DFO | 10500 | [5] | [5] | [5] | [5] |
| Tom G. Smith | MU5 | DFO | 10530 | [5] | [5] | [5] | [5] |
| Tom G. Smith | S-3 | DFO | 13620 | [5] | [5] | [5] | [5] |
| Stock Island | CT 1 | DFO | 15270 | [5] | [5] | [5] | [5] |
| Stock Island | MSDI | DFO | 10550 | [5] | [5] | [5] | [5] |
| Stock Island | MSD2 | DFO | 10670 | [5] | [5] | [5] | [5] |
| 1 | | | | | | | |

[1] Heat Rates shown are the FMPA modeling average heat rates of the units at maximum load.

[2] Historical operating data for this unit is available from Progress Energy Florida

[3] Historical operating data for this unit is available from Florida Power and Light

[4] Historical operating data for this unit is available from Orlando Utilities Commission

[5] Information is not available at this time

The tables above have been provided electronically as sheet "24" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

25. For each unit on the Company's system, provide the following data based upon historic data from 2010 and forecasted capacity factor values for the period 2011 through 2020. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

| | | | | Actual | Projected Capcity Factor (%) | | | | | | | | | |
|---------------------------|--------|-----------|-----------|----------|------------------------------|---------|--------|---------|--------|---------|-------|--------|--------|--------|
| Plant | Unit # | Unit Type | Fuel Type | 2010 [1] | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| 0 | | | | 101 | 02.00/ | 0.1.20/ | 22.004 | 0.4.10/ | 02.504 | 0.1.201 | 00.60 | 0.1.00 | 00.000 | 01.001 |
| Crystal River | 3 | NP | UR | [2] | 83.0% | 94.5% | 82.9% | 94.1% | 83.5% | 94.3% | 82.5% | 94,0% | 83.6% | 94.2% |
| St. Lucie [6] | 2 | NP | UR | [3] | 90.4% | 90.6% | 85.1% | 90.4% | 90.2% | 85.4% | 90.4% | 90.3% | 85.1% | 90.7% |
| Stanton Energy Center [6] | 1 | SI | BII | [4] | 64.1% | 63.2% | 68.1% | 69.0% | 70.3% | 70.2% | 67.6% | 61.3% | 58.0% | 60.3% |
| Stanton Energy Center | 2 | SI | BIT | [4] | //.4% | /8.2% | 80.5% | 819% | 82.0% | 82.3% | 80.7% | 75.8% | 12.3% | 76.1% |
| Stanton Energy Center | A | СС | NG | [4] | 27.9% | 25.3% | 27.0% | 27 1% | 28.3% | 29.9% | 32.1% | 38.5% | 40.9% | 39.7% |
| Indian River | CT A | GT | NG | [4] | 0.1% | 0.0% | 0.2% | 0.2% | 0.3% | 0.0% | 0.4% | 0.4% | 0.6% | 0.4% |
| Indian River | CT B | GT | NG | [4] | 0.1% | 0.0% | 0.2% | 0.2% | 0.4% | 0.2% | 0.5% | 0.5% | 0.6% | 0.6% |
| Indian River | CTC | GT | NG | [4] | 0.6% | 0.1% | 0.5% | 0.7% | 0.7% | 0.6% | 1.2% | 1.3% | 1.6% | 1.6% |
| Indian River | CTD | GT | NG | [4] | 0.8% | 0.3% | 0.8% | 1.2% | 1.5% | 1.0% | 1.7% | 1.9% | 2.0% | 21% |
| Cane Island | l | GT | NG | 3.0% | 1.9% | 1.1% | 2.0% | 2.6% | 2.8% | 2.6% | 3.7% | 4.0% | 5.2% | 4.0% |
| Cane Island | 2 | СС | NG | 17.9% | 8.0% | 4.8% | 7.1% | 8.6% | 8.5% | 9.5% | 13.8% | 13.9% | 17.4% | 15.7% |
| Cane Island | 3 | СС | NG | 62.8% | 19.4% | 15.5% | 19.3% | 20.8% | 23.7% | 24.4% | 26.7% | 28.1% | 39.0% | 31.6% |
| Stock Island | CT 2 | GT | DFO | 0.5% | 0.4% | 0.2% | 0.5% | 0.5% | 0.4% | 0.4% | 0.5% | 0.5% | 0.9% | 0.6% |
| Stock Island | CT 3 | GT | DFO | 0.4% | 0.5% | 0.5% | 0.8% | 0.8% | 0.6% | 0.4% | 0.5% | 1.0% | 0.9% | 0.8% |
| Stock Island | GT 4 | GT | DFO | 0.8% | 0.2% | 0.5% | 1.2% | 1.8% | 2.4% | 3.1% | 3.2% | 4.2% | 4 9% | 6.3% |
| Treasure Coast | 1 | CC | NG | 62.0% | 55.4% | 52.5% | 53.3% | 50.1% | 52.9% | 53.3% | 56.7% | 58.4% | 60.3% | 60.3% |
| Hansel Plant | 21 | CT | NG | | | | | | | | | | | - |
| Hansel Plant | 22 | CA | WH | 4.3% | 0.0% | 0.0% | 0.5% | 0.0% | [5] | [5] | [5] | [5] | [5] | [5] |
| Hansel Plant | 23 | CA | WH | | | | | | | | | | | |
| Tom G. Smith | GT-1 | GT | DFO | 0.0% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | GT-2 | СТ | NG | 7.10/ | 0.39/ | 0.19/ | 0.694 | 0.0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | S-5 | CA | WH | 7.170 | 0.3% | U.170 | 0.0% | 0.0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | MUT | IC | DFO | 0.5% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | MU2 | IC | DFO | 0.5% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | MU3 | IC | DFO | 0.5% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | MU4 | IC | DFO | 01% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | MU5 | IC | DFO | 0.5% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Tom G. Smith | S-3 | ST | DFO | 1.8% | 0% | 0% | 0% | 0% | [6] | [6] | [6] | [6] | [6] | [6] |
| Stock Island | CTI | GT | DFO | 1.3% | 0.2% | 0.5% | 1.2% | 1.8% | 2.4% | 3.1% | 3.2% | 4.2% | 4.9% | 6.3% |
| Stock Island | M SD I | IC | DFO | 2.3% | 15.5% | 16.7% | 17.8% | 18.0% | 19.5% | 18.7% | 19.5% | 19.2% | 18.6% | 19.1% |
| Stock Island | M SD2 | IC | DFO | 3.2% | 9.9% | 11.1% | 12.0% | 13.0% | 14.2% | 14.3% | 14.8% | 14.7% | 14.4% | 14.5% |
| | | | | | | | | | | | | | _ | |

Projected Unit Information - Capacity Factor (%)

[1] 2010 Capacity Factor is based upon Fiscal Year 2010 (October 2009 - September 2010)

[2] Historical operating data for this unit is available from Progress Energy Florida

[3] Historical operating data for this unit is available from Florida Power and Light

[4] Historical operating data for this unit is available from Orlando Utilities Commission

[5] Hansel Plant is currently planned for retirement in September 2014.

[6] The City of Lake Worth has provided notice to FMPA that it will exercise the right to modify its A RP full requirements membership. Effective January 1, 2014, the ARP will no longer utilize Lake Worth's generating resouces (TG Smith Units), including its entitlement shares in the Stanton and St. Lucie Projects.

The table above has been provided electronically as sheet "25" in the attached "FMPA TYSP Supplemental Tables 2011.xls."

26. Please complete the table below, providing a list of all of the Company's steam units or combustion turbines that are candidates for repowering. As part of this response, please provide the unit's fuel

and unit type, summer capacity rating, in-service date, and what potential conversion/repowering would be most applicable. Also include a description of any major obstacles that could affect repowering efforts at any of these sites, such as unit age, land availability, or other requirements.

| Plant Name | Fuel & Unit Type | Summer Capacity (MW) | In-Service Date | Potential Conversion Type |
|------------|---------------------|-------------------------|--------------------|------------------------------|
| N/A | | | | |
| | | | | |
| | | | | |
| | | | | |

FMPA has not identified any ARP generating units that are candidates for repowering at this time.

27. Please complete the table below, in electronic (Excel) and hard copy, regarding the Company's generation fleet and the typical use of each unit. Please identify capacity type as either Baseload, Intermediate, or Peaking, and group units by their capacity type. Please use the abbreviations for fuel and generation facilities from the FRCC Load and Resource Plan for the table below. (For example, a combustion turbine that is not part of a combined cycle unit is identified with generator code "GT.") Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Plant | Unit # | Unit Type | Fuel Type | Typical Capacity Factor [1] | Capacity Type | Summer Capacity |
|------------------|---------|----------------------|-----------|-----------------------------------|------------------|--------------------|
| | | | | (%) | | (MW) |
| Crystal River | 3 | NP | UR | 89% | Baseload | 26 |
| St. Lucie | 2 | NP | UR | 89% | Baseload | 49 |
| Stanton Energy | | | | | | |
| Center | 1 | ST | BIT | 65% | Baseload | 101 |
| Stanton Energy | | | | | | |
| Center | 2 | ST | BIT | 79% | Baseload | 84 |
| A STATE OF STATE | TENTING | The Time | 1.1.1.1.1 | Sub-Total | Baseload | 260 |
| Stanton Energy | | | | | | |
| Center | A [2] | CC | NG | 32% | Intermediate | 42 |
| Cane Island | 2 | CC | NG | 11% | Intermediate | 108 |
| Cane Island | 3 | CC | NG | 25% | Intermediate | 240 |
| Treasure Coast | 1 | CC | NG | 55% | Intermediate | 300 |
| | | L. S. Sarray | | Sub-Total | Intermediate | 690 |
| Indian River | CT A | GT | NG | 0% | Peaking | 18 |
| Indian River | CTB | GT | NG | 0% | Peaking | 18 |
| Indian River | CTC | GT | NG | 1% | Peaking | 22 |
| Indian River | CTD | GT | NG | 1% | Peaking | 22 |
| Cane Island | 1 | GT | NG | 3% | Peaking | 34 |
| Stock Island | CT2 | GT | DFO | 0% | Peaking | 15 |
| Stock Island | CT3 | GT | DFO | 1% | Peaking | 15 |
| Stock Island | GT4 | GT | DFO | 3% | Peaking | 45 |
| Hansel Plant | 21 | CT | NG | | Peaking | 28 |
| Hansel Plant | 22 | CA | WΗ | 0% | Peaking | 8 |
| Hansel Plant | 23 | CA | WH | | Peaking | 8 |
| Tom G. Smith | GT-1 | GT | DFO | 0% | Peaking | 26 |
| Tom G. Smith | GT-2 | CT | NG | 0.0% | Peaking | 20 |
| Tom G. Smith | S-5 | CA | W H | 0% | Peaking | 8 |
| Tom G. Smith | MUI | 1C | DFO | 0% | Peaking | 2 |
| Tom G. Smith | MU2 | IC | DFO | 0% | Peaking | 2 |
| Tom G. Smith | MU3 | IC | DFO | 0% | Peaking | 2 |
| Tom G. Smith | MU4 | IC | DFO | 0% | Peaking | 2 |
| Tom G. Smith | MU5 | IC | DFO | 0% | Peaking | 2 |
| Tom G. Smith | S-3 | ST | NG | 0% | Peaking | 24 |
| Stock Island | CT1 | GT | DFO | 3% | Peaking | 18 |
| Stock Island MS | MSDI | IC | DFO | 18% | Peaking | 6 |
| Stock Island MS | MSD2 | IC | DFO | 13% | Peaking | 7 |
| | TELL | 16 10 | 1000 1 - | Sub-Total | Peaking | 354 |
| | | and the state of the | | | Total | 1304 |

Existing Facilities as of January 1, 2011

[1] Represents the projected average capacity factor for 2011-20.

[2] Capacity shown excludes amounts purchased from Southern Company.

Planned Facilities during 2011 to 2020

| Plant | Unit# | Unit Type | Fuel Type | Typical Capacity Factor | Capacity Type | Summer Capacity |
|--|---------------|---------------|-----------|-------------------------------|------------------|--------------------|
| | | | 7 | (%) | | (MW) |
| N/A | | | | | | |
| | A State State | The contract | | Sub-Total | Baseload | 0 |
| Cane Island | 4 | CC | NG | 89% | Intermediate | 300 |
| | | 1 | 124 - 224 | Sub-Total | Intermediate | 300 |
| N/A | | | | | | |
| Service and the service of the servi | | - Andrewski (| A Start | Sub-Total | Peaking | 0 |
| | THE PARTY | A States | | 1 | Total | 300 |

The tables above have been provided electronically as sheet "27" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

28. Please complete the table below regarding the system's installed capacity, categorized by capacity type, for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| | Year | Baseload Capacity | Intermediate Capacity | Peaking Capacity | Total Installed Capacity |
|------|----------------|----------------------|--------------------------|---------------------|-----------------------------|
| | 2001 | 204 | 129 | 447 | 780 |
| | 2002 | 204 | 174 | 447 | 825 |
| | 2003 | 307 | 348 | 622 | 1,277 |
| | 2004 | 307 | 390 | 622 | 1,319 |
| ual | 2005 | 307 | 390 | 622 | 1,319 |
| Act | 2006 | 308 | 395 | 610 | 1,313 |
| | 2007 | 307 | 401 | 605 | 1,313 |
| | 2008 | 308 | 697 | 501 | 1,506 |
| | 2009 | 308 | 697 | 501 | 1,506 |
| | 2010 | 259 | 678 | 352 | 1,289 |
| | 2011 | 260 | 978 | 354 | 1,592 |
| | 2012 | 266 | 978 | 354 | ١,598 |
| | 2013 | 270 | 978 | 354 | 1,602 |
| ed | 2014 [1][2] | 239 | 978 | 263 | 1,480 |
| ject | 2015 | 239 | 978 | 220 | 1,437 |
| Pro | 2016 | 239 | 978 | . 220 | 1,437 |
| | 2017 | 239 | 978 | 220 | 1,437 |
| | 2018 | 239 | 978 | 220 | 1,437 |
| | 2019 | 239 | 978 | 220 | 1,437 |
| | 2020 | 239 | 978 | 220 | 1,437 |

- The City of Lake Worth has provided notice to FMPA that it will exercise the right to modify its ARP full requirements membership. Effective January 1, 2014, the ARP will no longer utilize Lake Worth's generating resources (TG Smith Units), including its entitlement shares in the Stanton and St. Lucie Projects.
- [2] The Hansel plant is currently planned for retirement in September 2014.

The table above has been provided electronically as sheet "28" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

29. Please provide the system average heat rate for the generation fleet for each year for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Y | 'ear | System Average Heat Rate |
|--------|------|-----------------------------|
| | | (BTU/kWh) |
| | 2001 | |
| | 2002 | |
| | 2003 | |
| Actual | 2004 | |
| | 2005 | |
| | 2006 | |
| - | 2007 | |
| | 2008 | |
| | 2009 | |
| | 2010 |] |
| | 2011 | |
| | 2012 | |
| | 2013 | |
| 2 | 2014 | |
| ecti | 2015 | |
| .io | 2016 | |
| 7 | 2017 | |
| | 2018 | |
| | 2019 | |
| | 2020 | |

FMPA is part of the Florida Municipal Power Pool and, as such, the resources used to serve the ARP are pooled with resources of the other Pool members to serve the energy needs of the ARP Participants and other Pool member loads. As such, information on the system average heat rate for the ARP generation resources, a subset of pool resources, is not tracked and is therefore not available.

30. Please provide the average cost of a residential customer bill, based upon a monthly usage of 1200 kilowatt-hours, in nominal and real dollars for the period 2001 through 2020. Please use the

Consumer Price Index to calculate real residential bill values. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Year | | Resid | lential Bill 200-kWh) | СРІ |
|-------|------|-------|--------------------------|-----|
| | | Real | Nominal | |
| | 2001 | | | |
| | 2002 | | | |
| | 2003 | | | |
| _ | 2004 | | | |
| na | 2005 | | | |
| Le la | 2006 | | | |
| | 2007 | | | |
| | 2008 | | | |
| | 2009 | | | |
| | 2010 | | | |
| | 2011 | | | |
| | 2012 | | | |
| | 2013 | | | |
| E | 2014 | | | |
| ect | 2015 | | | |
| io. | 2016 | | | |
| 2 | 2017 | | | |
| | 2018 | | | |
| | 2019 | | | |
| | 2020 | | | |

The All-Requirements Project (ARP) provides wholesale power to the ARP Participants and does not make retail sales.

POWER PURCHASES / SALES

31. Please identify each of the Company's existing and planned power purchase contracts, including firm capacity imports reflected in Schedule 7 of the Company's Ten-Year Site Plan. Provide the seller, capacity, associated energy, and term of each purchase, and provide unit information if a unit power purchase. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Seller | Contract Term | | Contract Capacity (MW) | | Annual Generation | Capacity Factor | Primary Fuel | Description |
|-------------------------------------|---------------|------------|---------------------------|-----------|----------------------|--------------------|--------------|--|
| | Begins [1] | Ends | Summer | Winter | (MWh) | (%) | (if any) | |
| Florida Power and Light Company | Jun-93 | 5/31/2013 | 45 | 45 | NA | NA | NA | PPA with Florida Power and Light |
| Southern Company Florida, LLC | Mar-01 | 9/30/2030 | 85.7 [2] | 85.7 [2] | NA | NA | NG (Primary) | Unit contingent purchase from the Stanton Energy Center CC Unit A |
| Oleander Power Project, LP | Feb-06 | [2/15/2027 | 160.2 [2] | 160.2 [2] | NA | NA | NG (Primary) | Unit contingent purchase from the Oleander Power Plant CT 5 |
| | | | | | • | | | |

Existing Purchased Power Agreements as of January 1, 2011

[1] Contract execution

[2] Based on capacity tests performed pursuant to the Contract, and reflective of FMPA and ARP Participant's percentage purchase amounts

Planned Purchased Power Agreements for 2011 through 2020

| Seller | Contract Term | | Contract Capacity (MW) | | Annual Capacity Generation Factor | | Primary Fuel | Description | |
|-------------|---------------|---------|---------------------------|--------|--------------------------------------|-----|--------------|---|--|
| | Begins | Ends | Summer | Winter | (MWh) | (%) | (if any) | | |
| Unknown [1] | 2020 | Unknown | 12 | NA | NA | NA | NA | Future PPA to meet 2020 18% Reserve Margin | |
| | | | | | | | | | |

[1] Seasonal peaking purchase from a supplier yet to be determined.

The tables above have been provided electronically as sheet "31" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

32. Please identify each of the Company's existing and planned power sales, including firm capacity exports reflected in Schedule 7 of the Company's Ten-Year Site Plan. Provide the purchaser, capacity, associated energy, and term of each purchase, and provide unit information if a unit power sale. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Existing Power Sales as of January 1, | 201 | 1 |
|---------------------------------------|-----|---|
|---------------------------------------|-----|---|

| Purchaser | urchaser Contract Term | | Contract Capacity (MW) | | Annual Generation | Capacity Factor | Primary Fuel | Description |
|-------------------|------------------------|------------|---------------------------|--------|----------------------|--------------------|-----------------|--|
| | Begins | Ends | Summer | Winter | (MWh) [1] | (%)[1] | (if any) | |
| City of Quincy | 1/1/2011 | 12/31/2015 | 26 | 25 | N/A | N/A | N/A | This is an All- Requirements sale. |
| | | | | | | | | |

[1] The projected annual energy usage for Quincy in 2011 is 116,026 MWh, which would be a Load Factor of approximately 51%.

Planned Power Sales for 2011 through 2020

| Purchaser | Contract Term | | Contract Capacity (MW) | | Annual Generation | Capacity Factor | Primary Fuel | Description |
|-----------|---------------|------|---------------------------|--------|----------------------|--------------------|-----------------|-------------|
| | Begins | Ends | Summer | Winter | (MWh) | (%) | (if any) | |
| | | | | | | | | |
| | | | | | | | | |

The tables above have been provided electronically as sheet "32" in the attached "FMPA TYSP Supplemental Tables 2011.xls."

33. Please discuss and identify the impacts on the Company's capacity needs of all known firm power purchases and sales over the planning horizon. As part of this discussion, please include whether options to extend purchases or sales exist, and the potential effects of expiration of these purchase or sales.

Refer to Question 31 to see the FMPA's current capacity purchases. The capacity purchases that expire during the 10 year planning horizon either do not have extension options or are not projected to provide benefit to the ARP beyond their scheduled expiration. The longer-term purchases (ending after 2020) do have extension options which will be evaluated at a time closer to their extension deadline dates. These contracts will be weighed against new generation or other potential future PPAs. The All-Requirements sale to the City of Quincy expires on December 31. This sale allows FMPA to better utilize their excess generation and lessen the capital cost impacts to FMPA's ARP members.

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ENVIRONMENTAL ISSUES

34. Please discuss the impact of environmental restrictions, relating to air or water quality or emissions, on the Company's system during the 2010 period, such as unit curtailments. As part of your discussion, please include the potential for environmental restrictions to impact unit dispatch or retirement during the 2011 through 2020 period.

By May 2013, MSD1 and MSD2 at the Stock Island facility will need to be retrofitted with control equipment, in order to meet the new requirements for stationary reciprocating internal combustion engines (RICE) in 40 CFR 63, Subpart ZZZZ.

FMPA is tracking the recently proposed Clean Air Transport Rule to determine the potential affects of new allowance allocations for NOx and SO2. Currently, EPA has proposed three alternatives that would have different outcomes for FMPA, depending on which alternative is implemented when the rule is finalized.

The recently proposed EGU MACT standards will impact OUC Stanton Units 1 and 2, in which FMPA has ownership interest. FMPA is communicating with OUC to track the impact of these proposed standards on those generation assets, but we are not able to provide specific information.

The recently proposed 316 B standards for cooling water intake structures will impact the FPL St. Lucie Unit 2 nuclear unit, in which FMPA has ownership interest. FMPA is communicating with FPL to track the impact of these proposed standards on this generation asset, but we are not able to provide specific information.

FMPA is also following the development of greenhouse gas (GHG) regulations by EPA and evaluating potential impacts.

35. Please provide the rate of emissions, on an annual and per megawatt-hour basis, of regulated materials and carbon dioxide for the generation fleet each year for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| | 11800 | SOX | | NOX | | Mercury | | Particu | lates | CO2e | |
|-----------|-------|--------|------|--------|------|---------|------|---------|-------|--------|------|
| , r | ear | lb/MWh | Tons | lb/MWh | Tons | lb/MWh | Tons | lb/MWh | Tons | lb/MWh | Tons |
| MR | 2001 | | | | | | | | | | |
| | 2002 | | | | | | | | | | |
| | 2003 | | | | | | | | | | |
| - | 2004 | | | | | | | | | | |
| na | 2005 | | | | | | | | | | |
| Act | 2006 | | | | | | | | | | |
| | 2007 | | | | | | | | | | |
| | 2008 | | | | | | | | | | |
| | 2009 | | | | | | | | | | |
| - | 2010 | | | | | | | | | | |
| | 2011 | | | | | | | | | | |
| 1.145 | 2012 | | | | | | | | | | |
| | 2013 | | | | | | | | | | |
| ed | 2014 | | | | | | | | | | |
| ect | 2015 | | | | | | | | | | |
| roj | 2016 | | | | | | | | | | |
| - | 2017 | | | | | | | | | | |
| | 2018 | | | | | | | | | | |
| | 2019 | | | | | | | | | | |
| | 2020 | | | | | | | | | | |

The Responsible Official at each plant in the generation fleet used by the ARP is responsible for reporting emissions information to all appropriate agencies. FMPA does not currently compile or aggregate this data for the fleet of resources that support the ARP.

FUEL

36. Please provide, on a system-wide basis, the historic average fuel price (in nominal \$/MMBTU) for each fuel type for the period 2001 through 2010. Also, provide the forecasted annual average fuel price (in nominal \$/MMBTU) for each fuel type for the period 2011 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Nor | ninal Fuel Price | Uranium | Coal | Natural Gas [1] | Residual | Distillate |
|-------|---------------------|---------|--------|--------------------|----------|------------|
| (\$/1 | MMBTU) | | | Gas [1] | - On | on |
| | 2001 | [2] | [3] | \$3.96 | [4] | [4] |
| 1431 | 2002 | [2] | [3] | \$3.38 | [4] | [4] |
| | 2003 | [2] | [3] | \$5.42 | [4] | [4] |
| | 2004 | [2] | [3] | \$5.92 | [4] | [4] |
| ual | 2005 | [2] | [3] | \$9.25 | [4] | [4] |
| Act | 2006 | [2] | [3] | * \$7.01 | [4] | [4] |
| | 2007 | [2] | [3] | \$7.32 | [4] | [4] |
| | 2008 | [2] | [3] | \$9.13 | [4] | [4] |
| | 2009 | [2] | [3] | \$3.98 | [4] | [4] |
| | 2010 | [2] | [3] | \$4.42 | [4] | [4] |
| | 2011 | \$0.62 | \$3.35 | \$6.33 | \$10.32 | \$14.74 |
| | 2012 | \$0.65 | \$3.56 | \$6.74 | \$10.95 | \$15.30 |
| | 2013 | \$0.68 | \$3.76 | \$7.27 | \$11.51 | \$15.80 |
| 151 | 2014 | \$0.71 | \$3.90 | \$7.65 | \$12.06 | \$16.23 |
| ted | 2015 | \$0.74 | \$4.07 | \$8.01 | \$12.46 | \$16.75 |
| ojec | 2016 | \$0.78 | \$4.21 | \$8.19 | \$12.92 | \$17.66 |
| Pre | 2017 | \$0.81 | \$4.36 | \$8.32 | \$13.40 | \$18.41 |
| | 2018 | \$0.83 | \$4.51 | \$8.24 | \$13.91 | \$19.16 |
| | 2019 | \$0.85 | \$4.97 | \$8.46 | \$14.27 | \$19.89 |
| | 2020 | \$0.87 | \$5.09 | \$8.81 | \$14.59 | \$20.59 |

[1] The historical natural gas values are the annual average of daily spot market prices for Gas Daily FGT Zone 3. Transportation and other charges would be in addition to these spot prices.

- [2] Historical Uranium pricing is available from Florida Power and Light, and Progress Energy Florida
- [3] Historical coal pricing is available from Orlando Utilities Commission
- [4] Historical actual annual Fuel Oil pricing is not available at this time.
- [5] The projected fuel costs are from fuel pricing received from R.W. Beck in Q1 of 2010 and were used in FMPA's 2010 IRP.

The table above has been provided electronically as sheet "36" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

37. Please provide, on a system-wide basis, the historic annual fuel usage (in GWh) for each fuel type for the period 2001 through 2010. Also, provide the forecasted annual fuel usage (in GWh) for each fuel type for the period 2011 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

| Fuel L (GW | Jsage Vh) | Uranium | Coal | Natural Gas | Residual Oil | Distillate Oil |
|---------------|--------------|---------|-------|-------------|--------------|----------------|
| | 2001 | 416 | 1124 | 798 | 0 | 27 |
| 1.1.1.1 | 2002 | 520 | 1169 | 1609 | 0 | 21 |
| | 2003 | 670 | 1388 | 2159 | 0 | 22 |
| 1.12.19 | 2004 | 677 | 1366 | 2066 | 0 | 17 |
| ua | 2005 | 628 | 1496 | 2051 | 0 | 27 |
| Let | 2006 | 684 | 1450 | 1927 | 0 | 19 |
| - | 2007 | 601 | 1558 | 2068 | 0 | 19 |
| | 2008 | 694 | 1444 | 2199 | 0 | 8 |
| -W. 1. | 2009 | 644 | 1499 | 2964 | 0 | 8 |
| | 2010 | 538 | 1,181 | 3,648 | 0 | 10 |
| | 2011 | 585 | 1,140 | 3,238 | 0 | 20 |
| 199.00 | 2012 | 626 | 1,136 | 3,611 | 0 | 22 |
| intro to a | 2013 | 627 | 1,200 | 3,781 | 0 | 28 |
| 2 | 2014 | 525 | 1,165 | 3,618 | 0 | 30 |
| ect | 2015 | 497 | 1,172 | 3,808 | 0 | 34 |
| fo | 2016 | 510 | 1,170 | 3,903 | 0 | 36 |
| - | 2017 | 495 | 1,138 | 4,095 | 0 | 38 |
| 13.5 - 1 | 2018 | 524 | 1,051 | 4,313 | 0 | 42 |
| | 2019 | 481 | 999 | 4,648 | 0 | 45 |
| | 2020 | 526 | 1,048 | 4,525 | 0 | 50 |

The table above has been provided electronically as sheet "37" in the attached "FMPA TYSP Supplemental Tables_2011.xls."

38. Please discuss how the Company compares its fuel price forecasts to recognized, authoritative independent forecasts.

FMPA fuel forecast data is obtained from authoritative, independent consultants. These forecasts are then compared to information received from other utilities, suppliers, market exchanges, and trade literature. ARP Participants and FMPA staff evaluate the reasonableness the data contained in any fuel forecast and adjust values as deemed appropriate.

39. For each fuel type (coal, natural gas, nuclear fuel, etc.), please discuss in detail the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.

Please see the responses in the following questions.

40. What steps has the Company taken to ensure gas supply availability and transport over the 2011 through 2020 planning period?

FMPA continually explores opportunities to diversify its natural gas supply portfolio and reviews industry trends as production sources change over time. FMPA also continues to evaluate its gas transportation capacity requirements to ensure an optimal amount of firm transportation capacity is reserved to ensure reliable delivery of natural gas to its generating units.

41. Regarding existing and planned natural gas pipeline expansion projects, including new pipelines, affecting the Company for the period 2011 through 2020, please identify each project and discuss it in detail.

Please refer to FMPA's Need for Power application for Cane Island Unit 4 submitted to the PSC in May 2008 for information regarding FMPA's position on existing and planned natural gas pipeline expansion projects.

Three projects have been added since the May 2008 application. They are as follows:

- 1. There was a small expansion on Gulfstream that increased the capacity of that system by 35,000 MMBtu/day. This capacity was fully subscribed by Progress Energy Florida and had no impact upon FMPA.
- 2. FPL had applied to build a new intrastate gas pipeline in Florida to serve facilities that it planned to convert to natural gas. This pipeline followed much of the same proposed path that the Sunshine project had proposed with the exception that it planned on receiving gas through a new interstate pipeline which would have brought gas into the state from new pipeline facilities bringing shale production to Transco's Station 85. The Sunshine Project planned to interconnect with Southern Natural at Cypress as its supply source.

This initial application was rejected by the Public Service Commission. FPL is continuing to evaluate available alternatives and may resubmit a modified application in the future.

It was not anticipated that this project would cause any direct impact upon FMPA. However, having a third pipeline into the state would be a positive for natural gas supply source diversity.

3. Transco has filed a two phased expansion plan for transporting gas from is Station 85 Pooling Point south on its Mobile Bay Pipeline lateral. This facility was initially constructed to deliver gas from the Mobile Bay area to it mainline facilities at Station 85. Due to the development of shale gas reserves in Texas, Arkansas, and northern Louisiana, substantial new volumes have become available at Station 85 that exceeds currently available "take-away" capacity. When second phase is complete, Transco will have the ability to deliver in excess of 600,000 MMBtu/day into a combination of Gulfstream and FGT. This new source of supply will further diversify supply options that are available to serve natural gas demand in Florida. FMPA has entered into a Precedent Agreement with Transco to acquire 50,000 MMBtu/day of firm capacity in this expansion.

42. Please discuss in detail any existing or planned natural gas pipeline expansion project, including new pipelines and off-shore projects, outside the State of Florida that will affect the Company over the period 2011 through 2020.

Please refer to the answer provided in the previous question. FMPA has no additional information at this time.

43. Regarding unconventional natural gas production (shale gas, tight sands, etc.), please discuss in detail the expected industry factors and trends for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.

FMPA believes that the continued developments of what is referred to as "unconventional production" will enhance the availability of natural gas supplies during the subject period. The Energy Information Administration has recently stated that the United States now has natural gas reserves sufficient to meet demand for the next 100 years. Detailed effects to this development and their impact to trends and/or industry factors have not been compiled by FMPA. However, the introduction of these supplies and the related pipeline facilities being built to move this production to market was a significant aspect for FMPA in its decision to subscribe to pipeline capacity in Transco's Station 85 South expansion.

44. Regarding liquefied natural gas (LNG) imports to the United States, please discuss in detail the expected industry factors and trends for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.

LNG offers supplemental supply to the United States that enhance deliverability of domestic production to meet demand. The prediction of a few years ago that stated that the United States would require this supply source to meet demand has not come to pass. With the success of domestic untraditional production, LNG is no longer thought of as required to meet demand. However, there has been a substantial increase worldwide in liquefaction facilities that will create an excess of LNG seeking market over the next few years. The result will cause a dampening effect on prices for natural gas in the next few years. Any time there is a price increase, additional cargoes will be sent to the U.S., thereby capping any price increase and the duration of the increase. This "LNG effect" will continue until worldwide LNG demand increases sufficiently to supply source into balance. This balance should occur sometime within the time period of the study, 2011 through 2020.

There were several planned LNG projects specifically targeting the Florida Market. However, only one of these projects is currently continuing to be actively developed, while all others have either been indefinitely postponed or canceled.

The Port Dolphin Energy project is the only LNG facility that continues its development. As of this date, it has obtained most of the critical permits for proceeding from federal, state, and local government bodies. They are now beginning to explore commercial interest in their proposed LNG deliveries. This gas will be delivered to existing pipeline facilities of Gulfstream and FGT just south of Tampa, assuming construction is completed. The full impact of gas being delivered to the state from these facilities has not been projected by FMPA staff at this time.

45. Please discuss in detail the Company's plans for the use of firm natural gas storage for the period 2011 through 2020.

Firm natural gas storage is viewed as a critical component to ensure reliable generation of power to meet FMPA obligations to serve ARP Participants retail needs. In the event of a production supply interruption, gas inventory held in FMPA's contracted storage capacity will guarantee that natural gas supplies are always available for the operation of FMPA's generating units. FMPA maintains a minimum inventory of approximately five (5) days of natural gas demand during time periods of greatest likelihood of a supply interruption (hurricane season). Currently, FMPA has 500,000 MMBtu of capacity with a firm withdrawal delivery capacity of 50,000 MMBtu/day. FMPA's storage capacity is scheduled to increase to 1 Bcf in 2011 to coincide with the commercial operation of Cane Island 4. At that time, withdrawal delivery capacity will increase to 100,000 MMBtu/day.

46. Please discuss the actions taken by the Company to promote competition within and among coal transportation modes.

FMPA is a joint owner in the coal-fired steam units Stanton Units 1 and 2, which are operated by OUC. OUC is the majority owner of these facilities and is responsible for all coal supply and transportation related arrangements for these units.

47. Regarding coal transportation by rail, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company. Also include a discussion of any expected changes to terminals and port facilities that could affect coal transportation for the Company.

See the response to question 46.

48. Regarding coal transportation by water, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company. Also include a discussion of any expected changes to terminals and port facilities that could affect coal transportation for the Company.

See the response to question 46.

49. Regarding planned changes and construction projects at coal generating units, please discuss the expected changes for coal handling, blending, unloading, and storage for the period 2011 through 2020.

See the response to question 46.

50. For the period 2011 through 2020, please discuss in detail the Company's plans for the storage and disposal of spent nuclear fuel. As part of this discussion, please include the Company's expectation regarding Yucca Mountain, dry cask storage, and litigation involving spent nuclear fuel, and the future of the Nuclear Waste Disposal Act.

Some FMPA members own entitlement shares in the St. Lucie Unit 2 nuclear generation facility, and some FMPA members have minority ownership interests in the Crystal River Unit 3 nuclear generation facility. Many of these FMPA members are also ARP Participants. Their respective entitlements and ownership shares in these nuclear facilities are resources for serving the hourly needs of the ARP. Information regarding the storage and disposal of spent nuclear fuel are controlled by the majority owners of these facilities, Florida Power and Light and Progress Energy Florida, respectively. FMPA has no role in these issues.

51. Regarding uranium production, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.

See the response to question 50.

52. Regarding the transportation of heavy fuel oil and distillate fuel oil, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.

The dual fuel capable resources of the ARP are designed predominately to use distillate fuel oil. Except for ARP generation resources in Key West, this service capability is for back-up purposes only when a natural gas supply interruption occurs. Consumed volumes of fuel oil are replaced at market pricing to maintain necessary inventory levels. Given the selective nature of whether FMPA operates certain of the ARP resources on fuel oil, changing market trends have little impact upon the ARP and its operations.

53. Please discuss the effect of changes in fossil fuel prices on the competitiveness of renewable technologies.

FMPA expects that as fossil fuel prices escalate, renewable technologies will become more viable.

54. Please discuss the effect of renewable resource development (for electric generation and nongeneration technologies) on fossil fuel prices.

FMPA expects that as renewable resources become more prolific, either due to economic competitiveness or regulation, fossil fuel prices will adjust downward.

TRANSMISSION

55. Please provide a list of all proposed transmission lines in the planning period that require certification under the Transmission Line Siting Act. Please also include those that have been approved, but are not yet in-service.

| Transmission Line | Line Length | Nominal Voltage | Date Need | Date TLSA | In-Service Date |
|-------------------|----------------|--------------------|--------------|--------------|--------------------|
| | (Miles) | (kV) | Approved | Certified | |
| N/A | | | | 1 | |

FMPA does not have any proposed transmission lines during the study period.