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DOCUMENT DESCRIPTION:

FPL (Cox) - (CONFIDENTIAL) Information contained in exhibits and attachments provided in support of petition for determination of need for Sweatt-Whidden 230 kV transmission line in Okeechobee, DeSoto, Highlands, and Glades Counties.

CONFIDENTIAL

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EXHIBIT A

CONFIDENTIAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20220045-EI

FLORIDA POWER AND LIGHT COMPANY

APRIL 1, 2022

IN RE: PETITION FOR DETERMINATION OF NEED FOR SWEATT-WHIDDEN 230KV TRANSMISSION LINE IN OKEECHOBEE, HIGHLANDS, AND DESOTO COUNTIES, BY FLORIDA POWER & LIGHT COMPANY

EXHIBIT A TO THE PETITION

The Sweatt-Whidden Project

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Executive Summary

This Petition provides the background information concerning the Sweatt-Whidden 230kV Project ("SWP" or "Project"), as well as the need for and benefits resulting from the SWP. The need for the SWP is based on the following considerations:

- The need to improve reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden substations;
- The need to provide an additional transmission path to increase east to west power transfer capabilities; and
- The need to mitigate potential overloads and low voltage conditions under contingency events.

The SWP will efficiently and effectively meet this need by improving reliability for FPL customers currently served from the existing 69kV circuit between Okeechobee and Whidden substations, increasing east to west power transfer capabilities of the transmission network by providing a resilient, hardened 230kV circuit between the east and west areas of FPL's territory north of Lake Okeechobee, relieving potential overloads and low voltage conditions under contingency events, and reducing line loading on existing transmission circuits.

FPL evaluated multiple transmission alternatives for meeting this identified need, which resulted in the selection of the SWP. The SWP presents the best alternative, taking into account the demand for electricity, enhancing electric system reliability and integrity, and addressing the need for abundant, low-cost electrical energy to assure the economic well-being of the citizens of this state. Furthermore, the project meets area load requirements by serving potential

future industrial, commercial and residential load, while maximizing system reliability and minimizing cost to customers.

I. Description of FPL Electrical Facilities

In order to provide an overview of FPL's existing electrical transmission system, a map of FPL's transmission network indicating the general location of generating plants, major substations, and transmission lines is shown in Attachment 1. As shown in Attachment 1, the load in the west portion of FPL's West Region is presently served by existing generation resources, one 500kV circuit east-west, one 230kV circuit east-west, one 138kV circuit east-west, and one 69kV circuit east-west. FPL's West Region also has five 230kV tie lines with other utilities.

A listing of FPL's historical and forecasted peak demand is provided in Schedules 3.1 and 3.2 of Florida Power & Light Company and Gulf Power Company's Ten Year Power Plant Site Plan (2022-2031) submitted on April 1, 2022, to the Florida Public Service Commission (the "Commission"), incorporated herein as Attachments 2 and 3.

The SWP will address the increasing forecasted demand in the Okeechobee, Highlands, DeSoto, Collier, Lee, Sarasota, and Manatee Counties and enhance reliability in the region by minimizing the area's exposure to double contingency events. The SWP best meets the needs of the Project Service Area, as described more fully in the following section.

II. The Sweatt-Whidden Project

Over the past six years (2015-2021), the FPL West Region has reported winter peak loads between 4000 MW and 5400 MW. FPL is forecasting that by 2031, the winter load in the West Region, an area that includes Collier, Lee, Hendry, Charlotte, Glades, Sarasota, DeSoto and Manatee Counties, will be approximately 5800 MW (an increase of approximately 400 MW with respect to the 2020 forecast). Transmission assessment studies conducted by FPL in 2021 have identified potential system limitations that will require reliability improvements for Okeechobee, Highlands, DeSoto, Collier, Lee, Sarasota, and Manatee Counties. The studies also identified that by 2025, load to generation imbalance in the West Region continues to grow, and the system would benefit from an increase in transfer capability into the area.

Currently, the east to west power transfer capability under several contingency scenarios, such as generation unavailable and loss of the existing cross state 500kV transmission line, is limited and the existing 69kV line is operating normally open to avoid potential thermal overloads. The proposed SWP would convert portions of FPL's existing Okeechobee-Whidden 69kV right-of-way ("ROW") to address the anticipated reliability limitation concerns beginning in 2025.

The SWP will consist of a new 230kV transmission line extending from FPL's Sweatt substation to FPL's Whidden substation, which will be designed to improve reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden

substations, increase east to west power transfer capabilities of the transmission network by providing a resilient, hardened 230kV circuit between the east and west areas of FPL's territory north of Lake Okeechobee, relieve potential overloads and low voltage conditions under contingency events, and reduce line loading on existing transmission circuits.

The SWP includes the construction of approximately 21 miles of a new single circuit 230kV transmission line in Okeechobee County and the conversion of approximately 59 miles of 69kV to 230kV in Okeechobee, Highlands, and DeSoto Counties (subject to final certification under the Florida Transmission Line Siting Act or "TLSA"). The line will be constructed with a single pole design on existing and new ROW and will have a voltage of 230kV. Approximately 75% of the new transmission line will follow the path of the existing 69kV transmission line. The project will also include the rebuild/conversion to 230kV of Brighton, Basinger (Glades Electric Cooperative, Inc. ("GEC")), Morgan Henderson (GEC), and Dorr Field substations. The entire SWP will serve existing and future FPL distribution substations in FPL's service territory and increase capacity to the transmission network with a resilient, hardened 230kV line.

Attachment 4 Page 1 is a map showing the SWP corridor route, along with the existing electrical facilities in the area. The corridor route is conceptual and for illustrative purposes only. The ultimate route will be selected through the TLSA process.

The estimated construction costs for SWP include design, engineering, ROW preparation, and land acquisition, in nominal or year-of-installation dollars.

Sweatt-Whidden Project Construction Costs	Estimated Cost in MM
Estimated Transmission Project Costs: Sweatt-Whidden 230kV line	$213.5 ($226.4 CPVRR)

III. Transmission Planning Criteria and Process

FPL plans, designs, and operates its transmission system to comply with North American Electric Reliability Corporation ("NERC") Reliability Standards. The Transmission System Planning Performance Requirements Reliability Standard (TPL-001-4) defines scenarios and expected levels of system performance that the Bulk Electric System ("BES") must comply with in the long-term planning horizon. In general, the system will remain stable and both thermal and voltage limits will be within applicable facility ratings for each of the contingency categories listed on Table 1 of the NERC Reliability Standard TPL-001-4 provided in Attachment 5. FPL follows the NERC standard guidance on system performance requirements for its transmission planning criteria.

FPL's transmission planning process consists of five major steps: (1) the preparation of system models, (2) the assessment of the transmission system performance to comply with NERC Reliability Standards, (3) the development and evaluation of transmission expansion alternatives, (4) the selection and approval of the preferred alternatives, and (5) the incorporation of the

expansion plan into the Florida Reliability Coordinating Council ("FRCC") Regional Planning Process. A more detailed discussion of these steps is provided in Attachment 6.

IV. Discussion of Need and Benefits

The need for the SWP is based on the following considerations:

- The need to improve reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden substations;
- The need to provide an additional transmission path to increase east to west power transfer capabilities; and
- The need to mitigate potential overloads and low voltage conditions under contingency events.

The existing Okeechobee-Whidden 69kV line is operated in a radial configuration due to contingency loading limitations, with a normal open switch at Childs 69kV substation. As a result of the radial configuration, customers along this line have experienced service interruptions for single contingency scenarios on the transmission system. In addition, transmission assessment studies conducted by FPL in 2021 have identified potential system limitations that will require reliability improvements for Okeechobee, Highlands, DeSoto, Collier, Lee, Sarasota, and Manatee Counties. These studies have also identified that by 2025, load to generation imbalance in the West Region continues to grow. The east to west power transfer capability under several contingency scenarios is limited, supporting the need for an additional transmission path.

The SWP will address these system reliability deficiencies and provide a resilient, hardened path from east to west. A detailed description of the system improvements follows:

Improve Customer Reliability

The existing Okeechobee-Whidden 69kV line is currently operated normally open at Childs 69kV substation to avoid exceeding line rating operating limits for contingency events. As a result of the radial configuration, customers along this line have experienced multiple service interruptions for single contingency scenarios in the transmission system. The SWP will provide a resilient, hardened path that will be operated normally closed and will reduce customer interruptions. The SWP will allow for a more reliable protection scheme. FPL studies have identified the following contingency event as one of the most critical scenarios for the Project Service Area reliability: With the Okeechobee-Whidden 69kV line operating normally closed, the loss of Treasure-Allapattah 230kV line section followed by the loss of Sherman-Nubbin 230kV line. Under this scenario, the Okeechobee-Whidden 69kV line could exceed the line rating operating limit and substation voltages could drop to a potential collapse (see Appendix B page 9). In order to avoid this type of event, the system will be sectionalized after the first contingency, causing consequential loss of service after the second contingency for FPL and GEC customers served from Dorr Field, Morgan Henderson (GEC), Brighton, Basinger (GEC), Okeechobee, JC Eisinger (GEC), Sherman and Allapattah substations. With the construction of the SWP, the number of impacted substations by the same contingency event is reduced. In addition, the SWP will considerably improve the voltage support in the area (see Appendix B page 10) to efficiently and effectively serve existing and future load in FPL and GEC distribution substations along the route of the SWP.

Increase Transfer Capability

Currently, the existing 69kV circuit between Okeechobee and Whidden substations is operated on a radial configuration resulting in 0 MW of power transfer capability between the east and west regions across this circuit. If the 69kV circuit is operated normally closed, the east to west flows would not change for the system under normal conditions (see Appendix A page 1), while under single contingency conditions, the flows will increase between 10 MW and 12 MW (see Appendix A pages 3, 5 & 7). The construction of the SWP will provide a significant increase of transfer capability for the system in the range of 95 MW under normal conditions (see Appendix A page 1) and 218 MW under single contingency conditions (see Appendix A pages 3, 5 & 7). The SWP will increase the power transfer capabilities of the transmission network by providing an additional hardened, resilient 230kV circuit between the east and west areas of FPL's territory, north of Lake Okeechobee.

Mitigate Potential System Limitations

FPL studies have identified the following contingency event as one of the most critical scenarios for the system: Ft. Myers Unit #2 unavailable followed by the loss of the Orange River-Ghost 500kV line. For the aforementioned scenario, several transmission lines could experience overloads as a result of the increase in the east to west flows including the existing 69kV circuit between Okeechobee and Whidden substations if operating normally closed. Appendix B page 1 shows the power flows under the scenario in Winter 2025 without the SWP implemented and operating the Okeechobee-Whidden 69kV line normally closed. The results show the Okeechobee-Whidden 69kV line loading as high as 126% of its 368 amp thermal rating and the Gridiron-Vandolah 230kV line loading as high as 103% of its 3000 amp thermal rating (see Appendix B page 1).

For another contingency scenario, Ft. Myers Unit #2 unavailable followed by the loss of the Charlotte-Vandolah 230kV transmission line, the results show the Gridiron-Vandolah 230kV line loading as high as 103% of its 3000 amp thermal rating (see Appendix B page 5). In order to mitigate the overloads mentioned above, it would be necessary to implement load management system in the West Area and reduce generation in the Central Area of FPL's service territory.

In addition, the following contingency event has significant reliability impact in the Project Service Area: With the Okeechobee-Whidden 69kV line operating normally closed, the loss of Treasure-Allapattah 230kV line followed by the loss of Sherman-Nubbin 230kV line (N-1-1). Under this scenario, the Okeechobee-Whidden 69kV would exceed the line rating operating limit and substation voltages would drop to a potential collapse. In order to avoid this type of event, the system will be sectionalized after the first contingency, causing consequential load loss after the second contingency for customers served from Dorr Field, Morgan Henderson (GEC), Brighton, Basinger (GEC), Okeechobee, JC Eisinger (GEC), Sherman and Allapattah substations (see Appendix B, page 9).

Appendix B pages 2, 6, and 10 show loadflow output diagrams for 2025 Winter peak conditions with the SWP in-service under the contingencies described above. With the construction of the SWP, there is a new, hardened, resilient 230kV east to west connection which resolves the 69kV overloads by converting the line, mitigates the overloads in the Gridiron-Vandolah 230kV, and reduces the number of impacted substations under N-1-1 contingencies. In addition, the SWP will considerably improve the voltage support in the area.

Reduce Line Loading

Due to the limited number of transmission connections between the east and west FPL regions, the loss of Orange River-Ghost 500kV transmission line in combination with another generation or transmission line outage would cause several transmission lines to overload. For the scenario of Ft. Myers Unit #2 unavailable followed by the loss of Orange River-Ghost 500kV line, the Corbett-South Bay-Alva 230kV circuit would experience overloads as high as 154% of its 1475 amp thermal rating and the Clewiston-Montura 138kV circuit will experience overloads as high as 137% of its 745 amp thermal rating (see Appendix C page 1). Moreover, the loss of any section of the Corbett-South Bay-Alva 230kV circuit followed by the loss of Orange River-Ghost 500kV line would cause overloads on the Ranch-South Bay 138kV line sections as high as 130% of its 745 amp thermal rating (see Appendix C page 9) and in the Clewiston-Montura 138kV line section as high as 127% of its 745 amp thermal rating (see Appendix B page 5).

Notably, Appendix C page 2 shows that overloads in the Corbett-South Bay-Alva 230kV line sections are reduced between 11% and 13% under contingency scenarios with the SWP in-service. It also shows that the Clewiston-Montura 138kV line section overload is reduced by 8%.

Appendix C pages 6 and 10 show overloads decreasing by 17% in the Clewiston-Montura 138kV line section and the Ranch-South Bay 138kV line section with the SWP in-service.

Project Benefits

The construction of the SWP provides the following benefits to the Project Service Area:

- Provides a more reliable delivery of power to FPL customers;
- Substantially mitigates customer impact during contingency events;
- Provides resilient, hardened transmission service to the area;
- Improves voltage support in the area to efficiently and effectively serve existing and future load in FPL distribution substations along the route of the project;
- Increases east to west power transfer capabilities of the transmission network by providing an additional 230kV circuit between the east and west areas of FPL's territory north of Lake Okeechobee;
- Reduces line loading on existing transmission circuits;
- Reduces transmission losses by approximately 3 MW at peak load levels and approximately 2 MW at off peak load levels; and
- Meets the Project Service Area's long term reliability requirements.

V. Discussion of Project Transmission Alternatives

In order to maintain a reliable electric system for the Project Service Area and meet the identified need discussed above, FPL evaluated the following transmission alternatives for SWP. The factors used to evaluate the performance of these alternatives include reliability, cost, feasibility, and compatibility with long range plans. Attachment 8 includes a matrix comparing each of the transmission alternatives.

Alternative I

The Ft. Drum-Whidden Project consists of a new 230kV transmission line extending from FPL's Ft. Drum substation in Indian River County to FPL's Whidden substation in DeSoto County. It will require the construction of approximately 92 miles (subject to certification under the Florida TLSA) of a single circuit 230kV transmission line in the Indian River, Okeechobee, Highlands, and DeSoto Counties.

Attachment 4 Page 2 is a map showing the proposed Alternative I Project along with the existing electrical facilities in the area. The line route is conceptual and for illustrative purposes only. The estimated construction cost of this alternative is $283.9 million ($300.3 million CPVRR).

This alternative was rejected for the following reasons:

1. It does not provide the needed reliability improvements for all customers served from the existing 69kV circuit between Okeechobee and Whidden substations.
2. The cost of the alternative is approximately $70 million higher than the SWP.
3. This alternative does not provide for future transmission network flexibility, nor does it substantially improve reliability in the Project Service Area because it only allows for reconfiguration of existing infrastructure on the 69kV network.

Alternative II

The Martin-Whidden Project consists of a new 230kV transmission line extending from FPL's Martin substation in Martin County to FPL's Whidden substation in DeSoto County. It would require the construction of approximately 87 miles (subject to certification under the Florida

TLSA) of a single circuit 230 kV transmission line in Martin, Okeechobee, Highlands, and DeSoto Counties.

Attachment 4 Page 3 is a map showing the proposed Alternative II Project along with the existing electrical facilities in the area. The line route is conceptual and for illustrative purposes only. The estimated construction cost of this alternative is $223.3 million ($236.5 million CPVRR).

This alternative was rejected for the following reasons:

1. It does not provide the needed reliability improvements for all customers served from the existing 69kV circuit between Okeechobee and Whidden substations.
2. The cost of the alternative is approximately $10 million higher than the SWP.
3. This alternative does not substantially improve reliability in the Project Service Area because it only allows for reconfiguration of existing infrastructure on the 69kV network.

Attachment 8 shows the decision-making analysis which summarizes the points of comparison of the SWP and Alternatives I and II, described above. The points of comparison are cost, reliability, ROW diversity, system expandability, operational flexibility, and construction difficulty.

VI. Adverse Consequences of Not Constructing the Sweatt-WhiddenProject

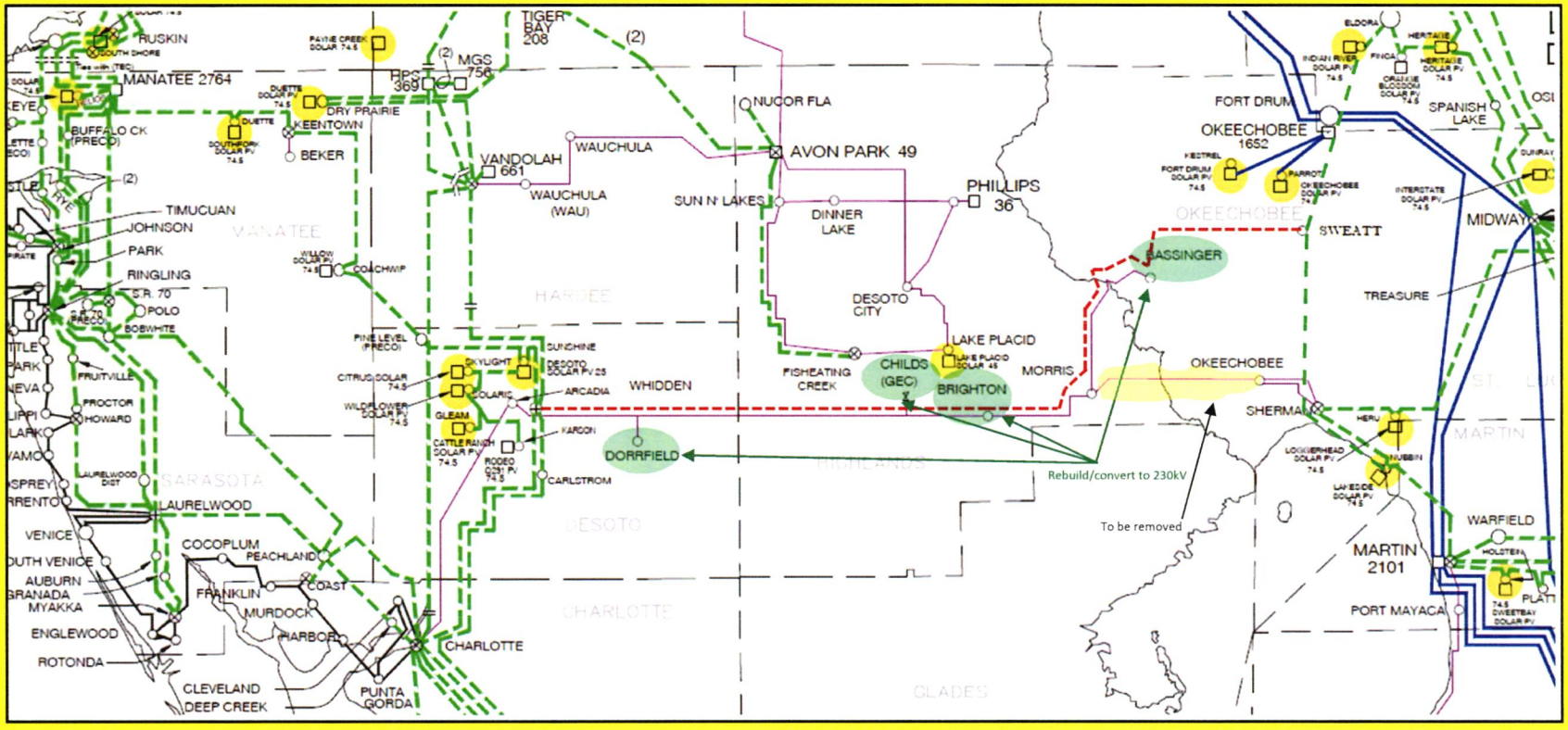
The purpose and need for the SWP is to improve reliability for FPL customers as described in detail above. If the SWP is not built by December 2025, then sufficient transmission capacity

would not be available to serve the existing and future industrial, commercial, and residential customers in the Project Service Area and, by virtue of the current radial transmission service configuration, system reliability and integrity would not be at the same level delivered to other FPL customers which have normal looped transmission service.

VII. Conclusion

The SWP is needed by December 2025 to efficiently and effectively improve reliability for customers served from the FPL's existing 69kV circuit between Okeechobee and Whidden substations, provide a transmission route to increase east to west power transfer capability, mitigate potential overloads and low voltage conditions under contingency events, and reduce line loading on existing transmission circuits. The Project is the most cost-effective alternative, taking into account the demand for electricity, the enhancement of electric system reliability and integrity, and the need for abundant, low-cost electrical energy to assure the economic well-being of the citizens of this state. Furthermore, the Project meets area load requirements by serving potential future industrial, commercial and residential load, while maximizing system reliability and minimizing cost to customers. The Commission, therefore, should grant FPL's Petition for a Determination of Need for the Sweatt-Whidden Project and determine that the cost and reliability benefits of the Project would preserve and enhance electric system reliability and integrity in the area.

Map of Study Area With Existing Facilities and SWP



LEGEND

TRANSMISSION LINES

- 500kV
- 230kV
- 69kV
- 230kV NEW

GENERATING PLANTS - CAPABILITY IN GROSS MEGAWATTS

- GENERATING PLANT
- GENERATING PLANT WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- SOLAR PLANTS

SUBSTATIONS

- TRANSMISSION SUBSTATION
- TRANSMISSION SUBSTATION WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- DISTRIBUTION SUBSTATION

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Map of Study Area with Existing Facilities and SWP
Exhibit FP-2, Page 1 of 1

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20220045-EI

List of Contingencies

		Base Case		TLSA Project	
Contingency	**Line Overload/Substation**	**Loading (%)**	**Low Voltage (P.U.)**	**Loading (%)**	**Low Voltage (P.U.)**
Ft. Myers 2 Out + Orange River-Ghost 500kV	Okeechobee - Morris 69kV	126	...	No violation after conversion	...
	Morris - Brighton 69kV	117	...	No violation after conversion	...
	Brighton - Morgan Hen 69kV	111	...	No violation after conversion	...
	Morgan Hen - Doorfield 69kV	105	...	No violation after conversion	...
	Gridiron-Vandolah 230kV	103	...	97	...
Ft. Myers 2 Out + Charlotte-Vandolah 230kV	Gridiron-Vandolah 230kV	103	...	98	...
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV	Okeechobee - Morris 69kV	134	...	N/A	...
	Morris - Brighton 69kV	130	...	N/A	...
	Brighton - Morgan Hen 69kV	136	...	N/A	...
	Morgan Hen - Doorfield 69kV	141	...	N/A	...
	Morris 69kV	...	NonConv	...	No violation after conversion
	Brighton 69kV	...	NonConv	...	No violation after conversion
	Morgan Hen	...	NonConv	...	No violation after conversion
	Dorr Field	...	NonConv	...	No violation after conversion

Numbers based on Winter 2025 cases.
Overload % based on Rate B
NonConv (unacceptable Voltage level in several busses)
P.U. = Per Unit

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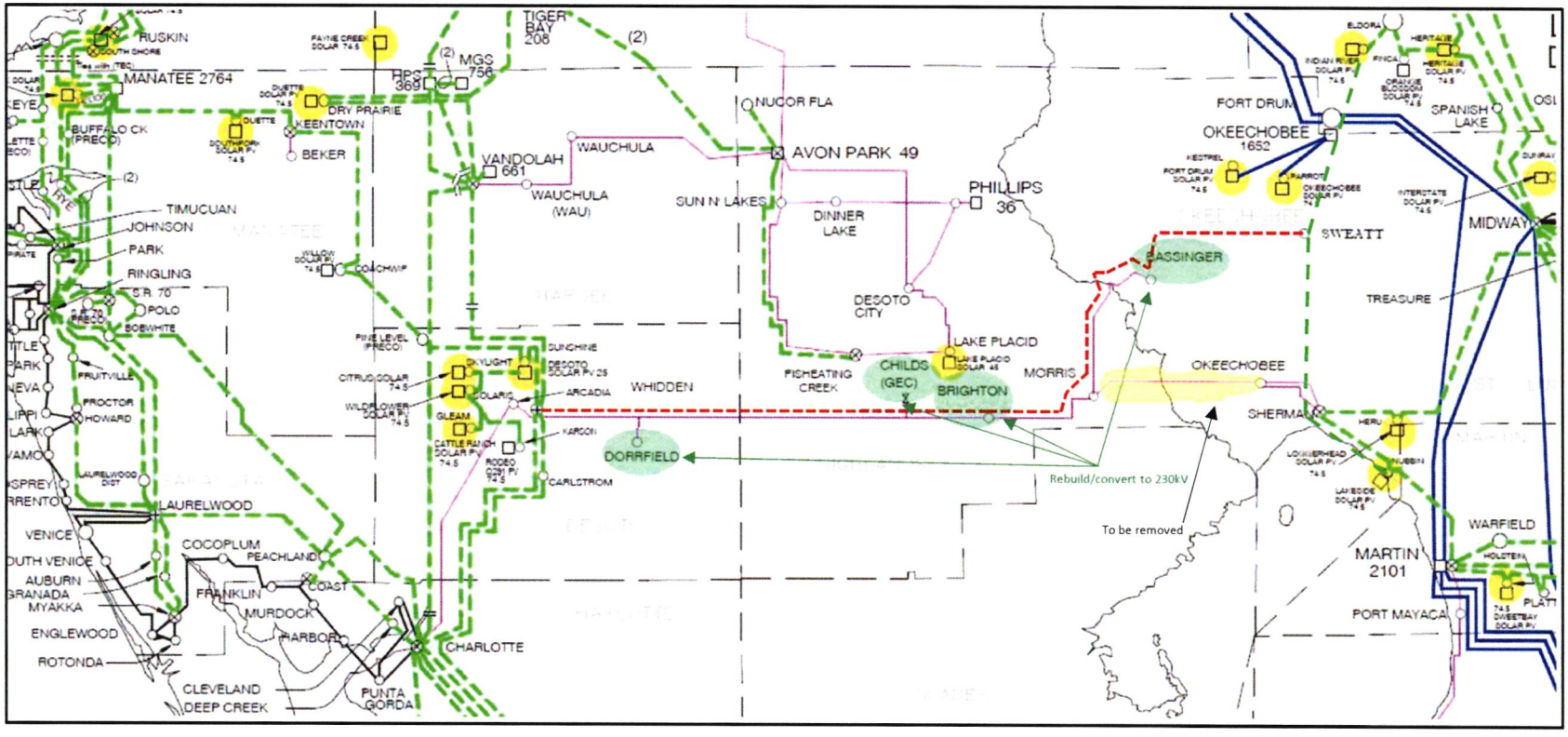
List of Contingencies
Exhibit FP-4, Page 1 of 1

FPL 000019
20220045-EI

Map of Study Area With Existing Facilities and Proposed Project



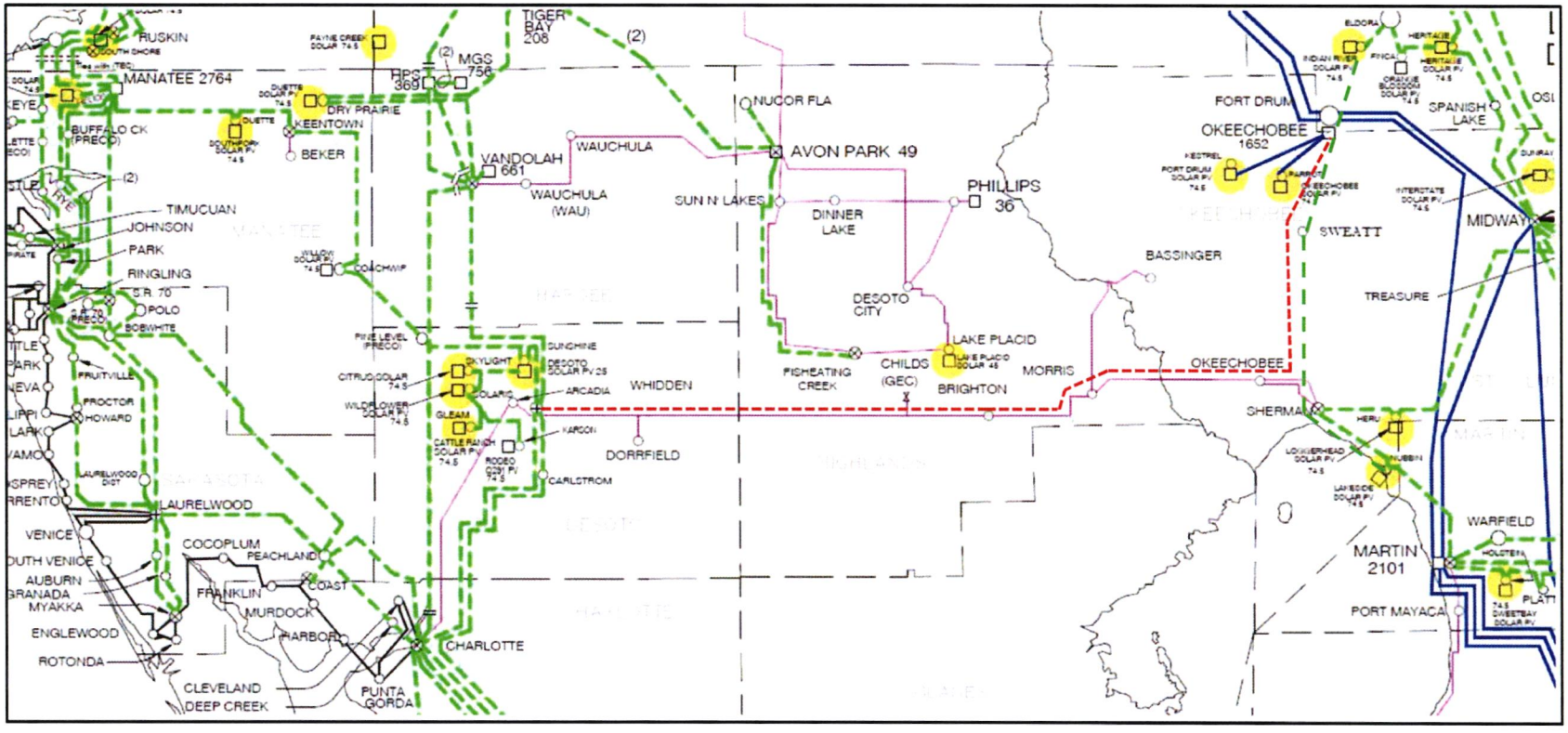
LEGEND

TRANSMISSION LINES
- 500kV
- 230kV
- 69kV
- 230kV NEW

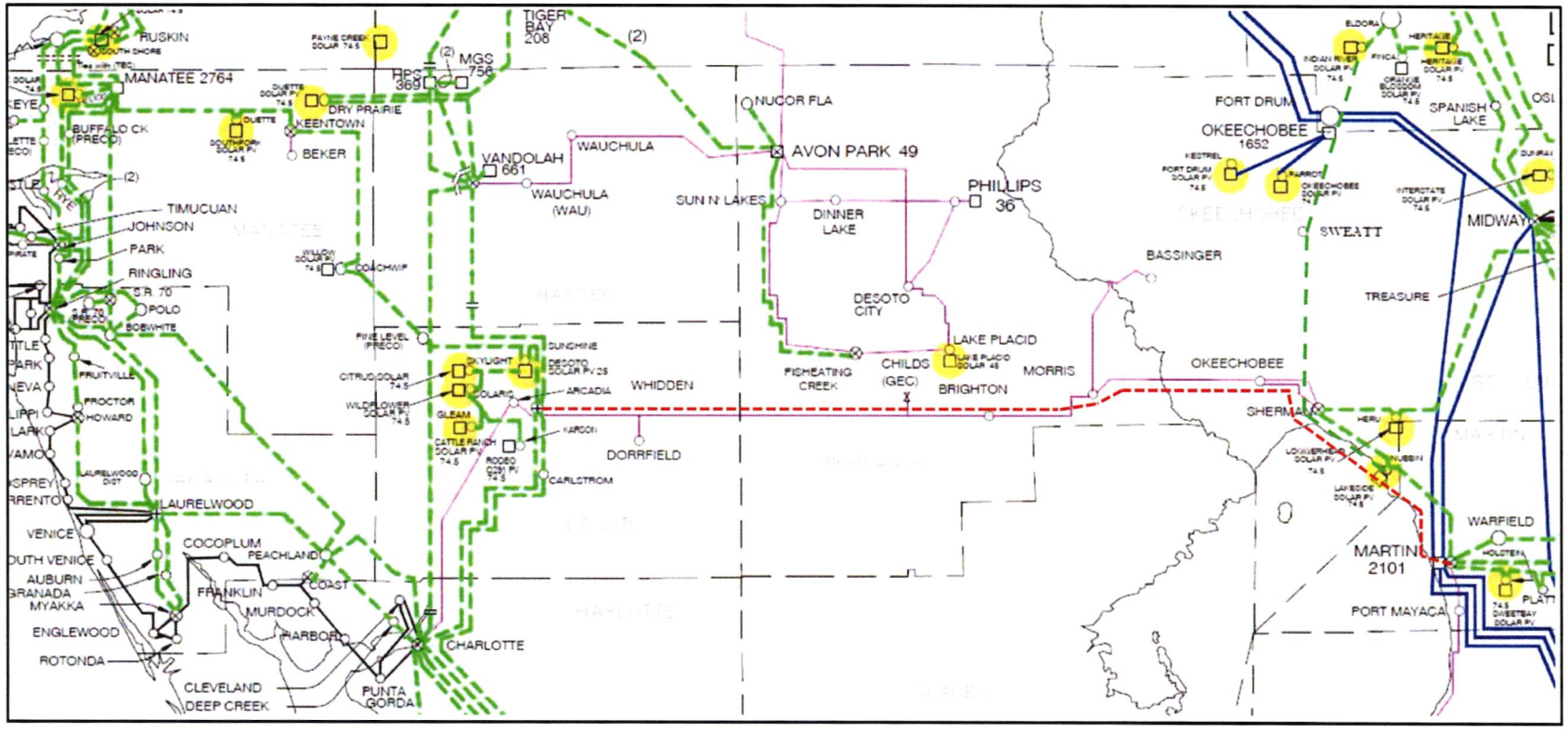
GENERATING PLANTS - CAPABILITY IN GROSS MEGAWATTS
- GENERATING PLANT
- GENERATING PLANT WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- SOLAR PLANTS

SUBSTATIONS
- TRANSMISSION SUBSTATION
- TRANSMISSION SUBSTATION WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- DISTRIBUTION SUBSTATION

Map of Study Area With Existing Facilities and Alternative I



Map of Study Area With Existing Facilities and Alternative II



LEGEND

TRANSMISSION LINES
- 500kV
- 230kV
- 69kV
- 230kV NEW

GENERATING PLANTS - CAPABILITY IN GROSS MEGAWATTS
- GENERATING PLANT
- GENERATING PLANT WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- SOLAR PLANTS

SUBSTATIONS
- TRANSMISSION SUBSTATION
- TRANSMISSION SUBSTATION WITH TRANSFORMATION OF TRANSMISSION VOLTAGE
- DISTRIBUTION SUBSTATION

Transfer Analysis Summary Table

		Base Case	TLSA Project	Alt.I	Alt.II	
Contigency	Monitored Flowgate Branch (East-West Flow)	Flow (MW)	Flow (MW)	Flow (MW)	Flow (MW)	Appendix
No Contingency (Normal System Condition)	Okeechobee-Whidden 69kV	0	...	...	...	A.page1
	Sweatt-Whidden 230kV	...	95	...	...	A.page1
	Ft. Drum-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	102	...	A.page2
	Martin-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	...	158	A.page2
Loss of Orange River-Ghost 500kV	Okeechobee-Whidden 69kV	12	...	...	...	A.page3
	Sweatt-Whidden 230kV	...	217	...	...	A.page3
	Ft. Drum-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	226	...	A.page4
	Martin-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	...	286	A.page4
Unit Outage of Manatee 3	Okeechobee-Whidden 69kV	10	...	...	...	A.page5
	Sweatt-Whidden 230kV	...	206	...	...	A.page5
	Ft. Drum-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	199	...	A.page6
	Martin-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	...	293	A.page6
Unit Outage of FT. Myers 2	Okeechobee-Whidden 69kV	11	...	...	...	A.page7
	Sweatt-Whidden 230kV	...	218	...	...	A.page7
	Ft. Drum-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	208	...	A.page8
	Martin-Whidden 230kV + Okeechobee-Whidden 69kV	...	...	...	308	A.page8

Numbers based on Winter 2025 cases.
MW = Megawatt

Contingency Analysis Summary Table

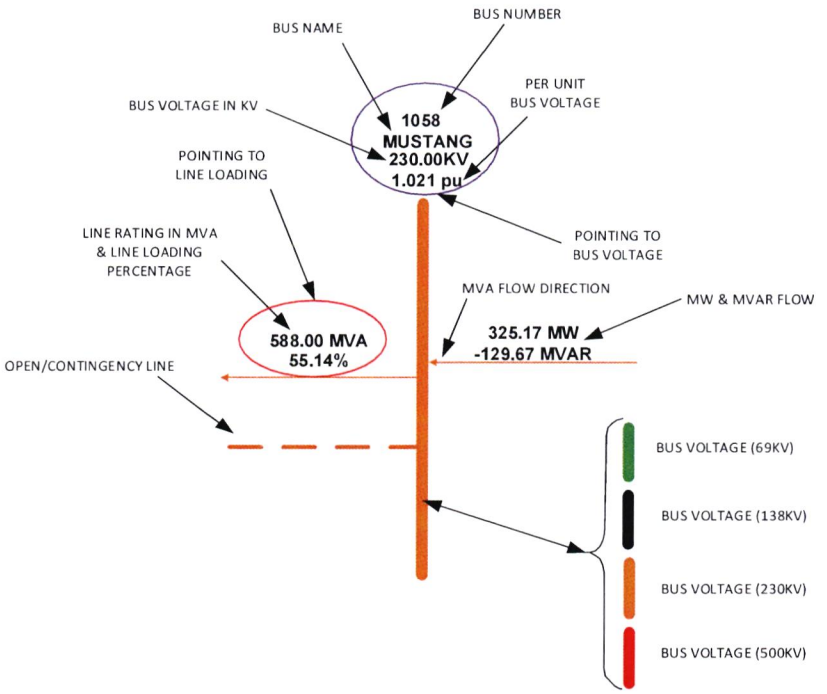
		Base Case		TLSA Project		Alt.I		Alt.II			
Contingency	Line Overload/Substation	Loading (%)	Low Voltage (P.U.)	Loading (%)	Low Voltage (P.U.)	Loading (%)	Low Voltage (P.U.)	Loading (%)	Low Voltage (P.U.)	Appendix	TLSA Project Benefit
Ft. Myers 2 Out + Orange River-Ghost 500kV	Okeechobee - Morris 69kV	126	...	No violation after conversion	...	101	...	93	...	B page 1,2,3,4	Mitigate overload
	Morris - Brighton 69kV	117	...	No violation after conversion	...	92	...	86	...	B page 1,2,3,4	Mitigate overload
	Brighton - Morgan Hen 69kV	111	...	No violation after conversion	...	86	...	79	...	B page 1,2,3,4	Mitigate overload
	Morgan Hen - Doorfield 69kV	105	...	No violation after conversion	...	80	...	73	...	B page 1,2,3,4	Mitigate overload
	Gridiron-Vandolah 230kV	103	...	97	...	89	...	94	...	B page 1,2,3,4	Mitigate overload
	Alva-Mustang 230kV	119	...	106	...	105	...	103	...	C page 1,2,3,4	Reduce line loading
	Alva-Reservoir 230kV	124	...	113	...	109	...	109	...	C page 1,2,3,4	Reduce line loading
	South Bay-Reservoir 230kV	125	...	113	...	110	...	110	...	C page 1,2,3,4	Reduce line loading
	South Bay-Roadrunner 230kV	153	...	142	...	138	...	139	...	C page 1,2,3,4	Reduce line loading
	Corbett-Roadrunner 230kV	154	...	143	...	138	...	139	...	C page 1,2,3,4	Reduce line loading
	Clewiston-Montura 138kV	139	...	129	...	124	...	126	...	C page 1,2,3,4	Reduce line loading
Ft. Myers 2 Out + Charlotte-Vandolah 230kV	Gridiron-Vandolah 230kV	103	...	98	...	98	...	96	...	B page 5,6,7,8	Mitigate overload
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV	Okeechobee - Morris 69kV	134	...	No violation after conversion	...	134	...	134	...	B page 9,10,11.12	Improve reliability and reduce load shedding
	Morris - Brighton 69kV	130	...	No violation after conversion	...	131	...	131	...	B page 9,10,11.12	Improve reliability and reduce load shedding
	Brighton - Morgan Hen 69kV	136	...	No violation after conversion	...	136	...	136	...	B page 9,10,11.12	Improve reliability and reduce load shedding
	Morgan Hen - Doorfield 69kV	141	...	No violation after conversion	...	142	...	141	...	B page 9,10,11.12	Improve reliability and reduce load shedding
	Morris 69kV	...	NonConv	...	No violation after conversion	...	NonConv	...	NonConv	B page 9,10,11.12	Improve reliability and reduce load shedding
	Brighton 69kV	...	NonConv	...	No violation after conversion	...	NonConv	...	NonConv	B page 9,10,11.12	Improve reliability and reduce load shedding
	Morgan Hen	...	NonConv	...	No violation after conversion	...	NonConv	...	NonConv	B page 9,10,11.12	Improve reliability and reduce load shedding
	Doorfiled	...	NonConv	...	No violation after conversion	...	NonConv	...	NonConv	B page 9,10,11.12	Improve reliability and reduce load shedding
South Bay-Reservoir 230kV + Orange River-Ghost 500kV	Clewiston - Montura 138kV	127	...	111	...	111	...	106	...	C page 5,6,7,8	Reduce line loading
Corbett-Roadrunner 230kV + Orange River-Ghost 500kV	Ranch - Oscemill 138kV	130	...	113	...	113	...	107	...	C page 9,10,11.12	Reduce line loading
	South Bay - Osceola 138kV	129	...	112	...	113	...	107	...	C page 9,10,11.12	Reduce line loading

Numbers based on Winter 2025 cases.
Loading % based on Rate B
NonConv (Voltage unacceptable level in several busses)
P.U. = Per Unit

Appendix A

Load Flow Diagrams / Transfer Analysis

Load Flow Diagram Key



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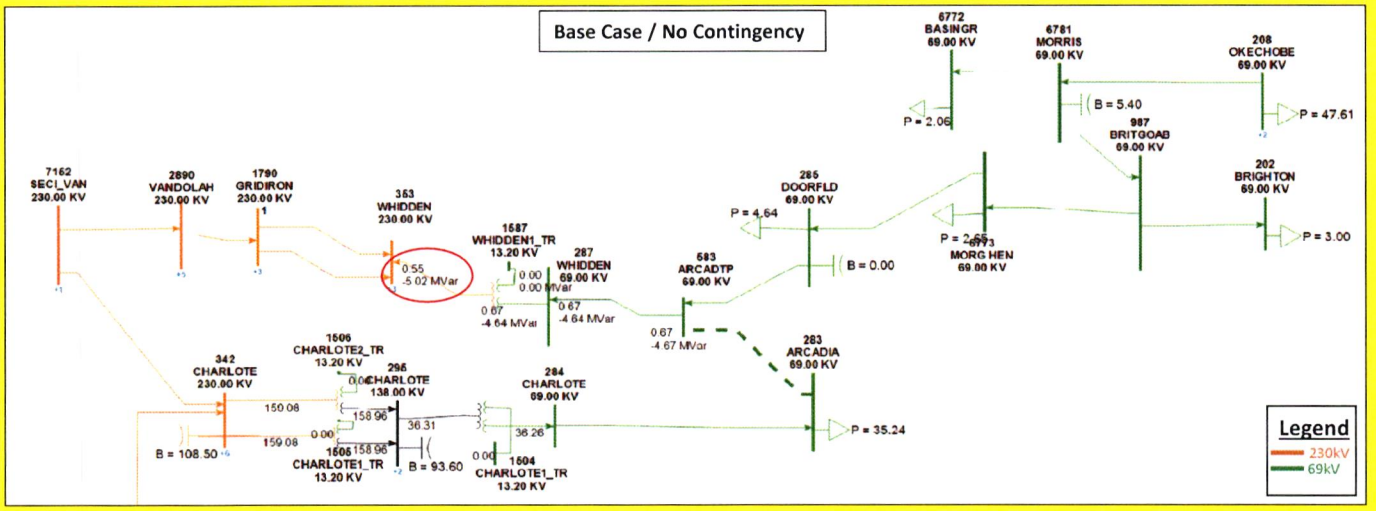

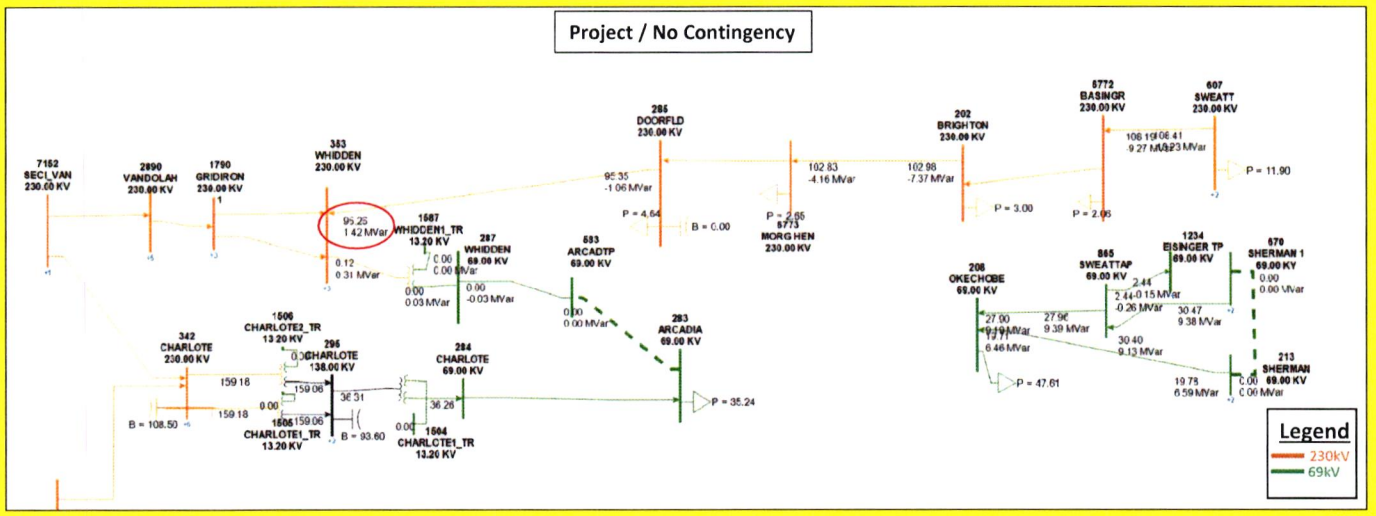

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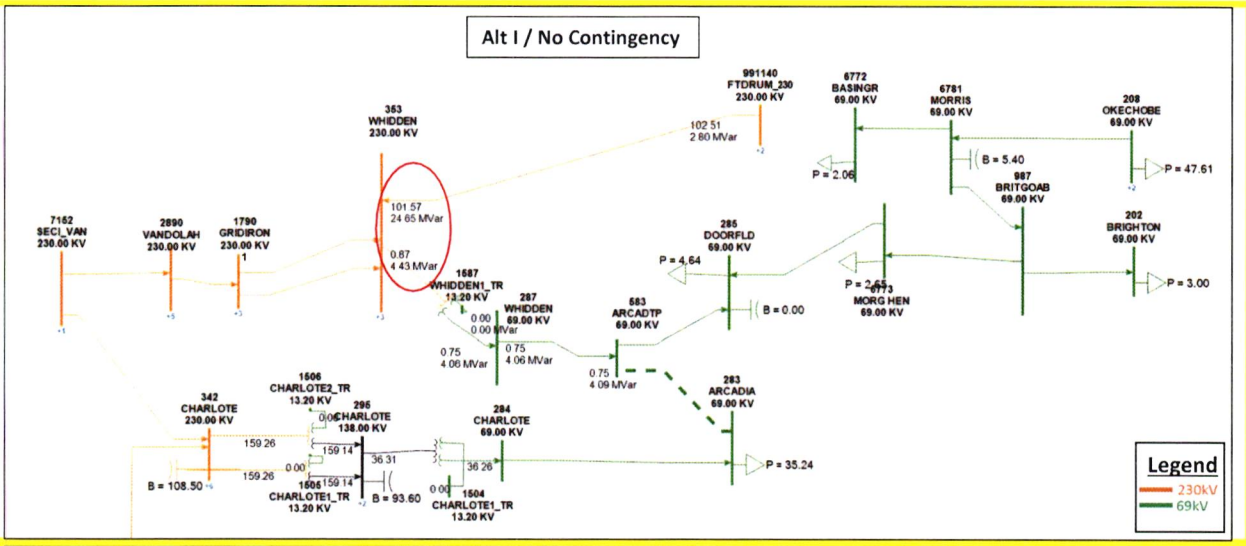

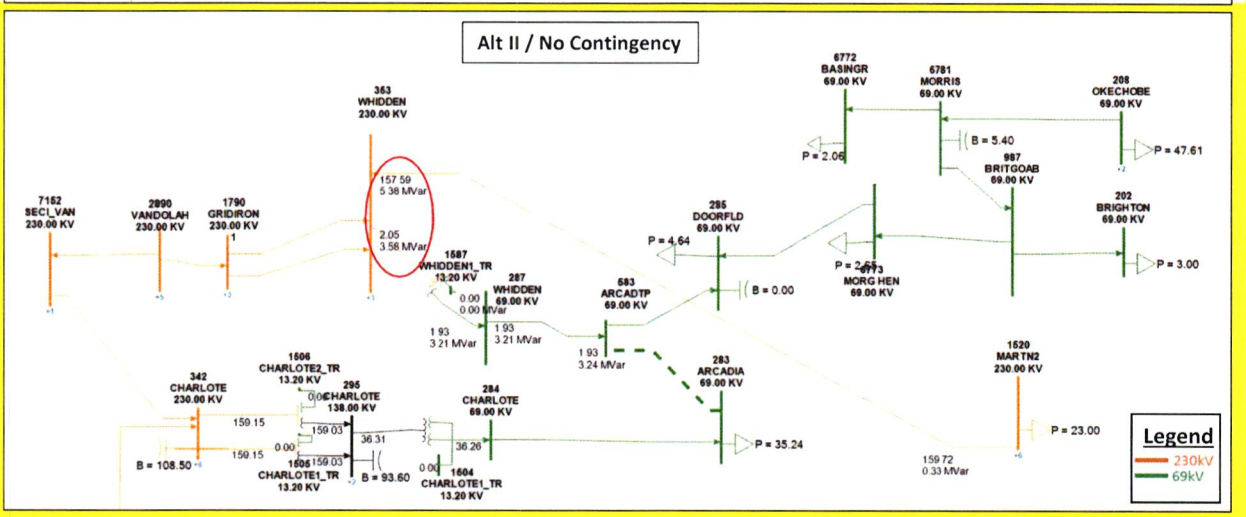

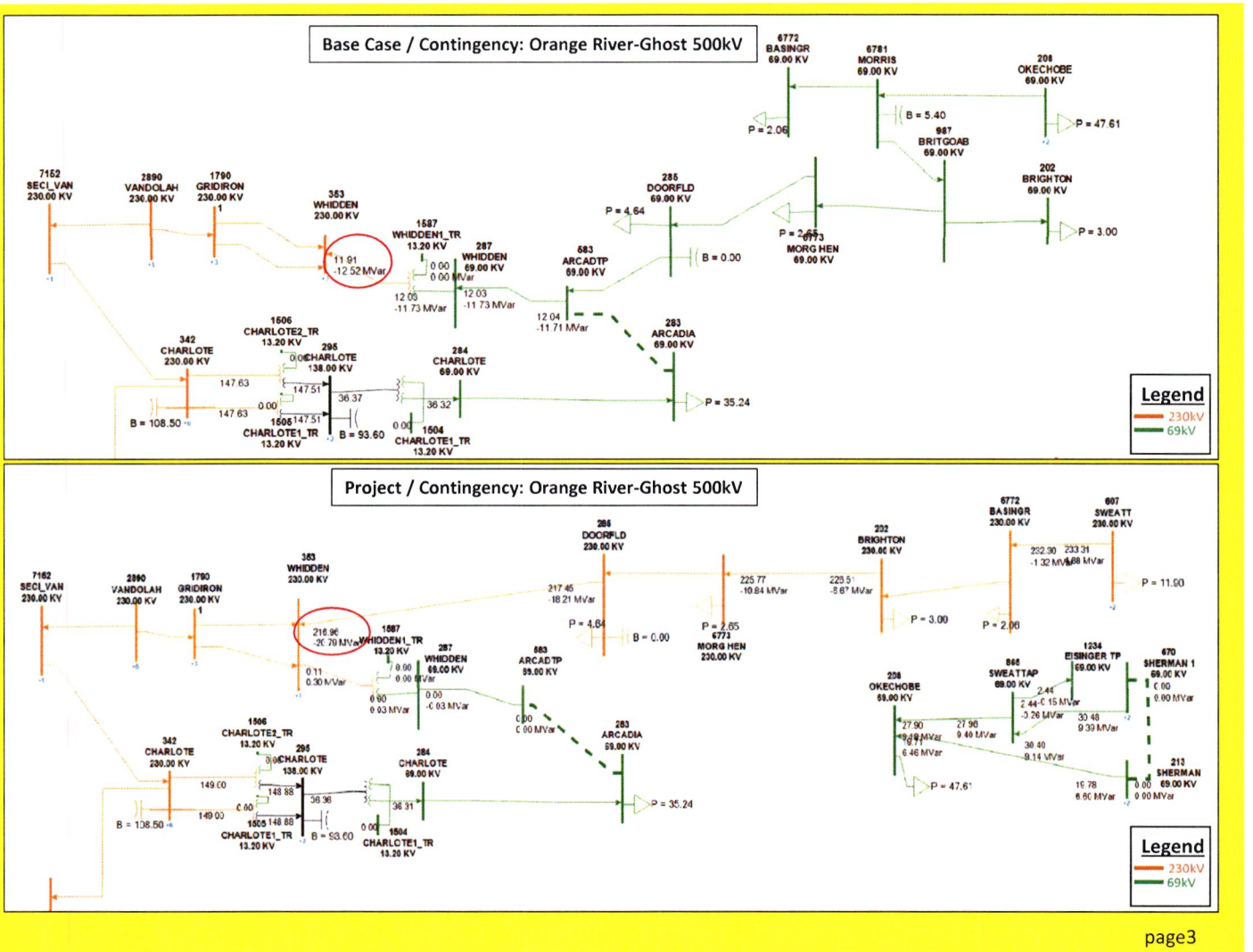
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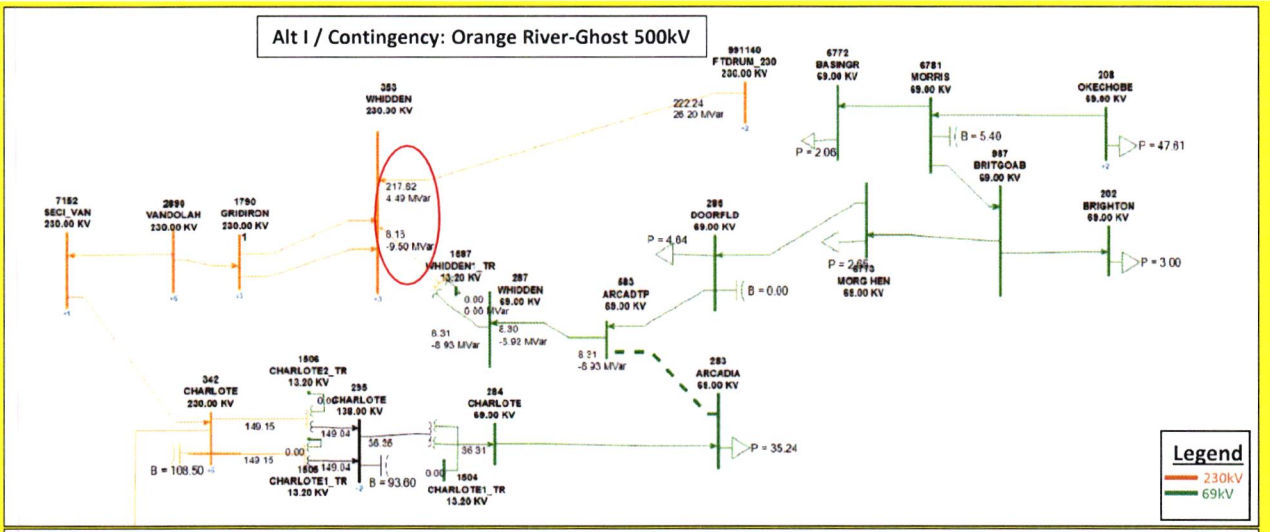
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
11.91 -12.52 MVar
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
12.05 -11.73 MVar
12.03 -11.73 MVar
583 ARCADTP 69.00 KV
12.04 -11.71 MVar
285 DOORFLD 69.00 KV
P = 4.64
B = 0.00
6772 BASINGR 69.00 KV
P = 2.06
6781 MORRIS 69.00 KV
B = 5.40
208 OKECHOBE 69.00 KV
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
6773 MORG HEN 69.00 KV
283 ARCADIA 69.00 KV
P = 35.24
342 CHARLOTE 230.00 KV
B = 108.50
1506 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
147.63
147.51
0.00
36.37
B = 93.60
1505 CHARLOTE1_TR 13.20 KV
284 CHARLOTE 69.00 KV
36.32
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV
Project / Contingency: Orange River-Ghost 500kV
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
216.96 -20.79 MVar
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
0.11 0.30 MVar
0.00 0.03 MVar
583 ARCADTP 69.00 KV
0.00 0.00 MVar
286 DOORFLD 230.00 KV
217.46 -18.21 MVar
225.77 -10.84 MVar
P = 4.64
B = 0.00
P = 2.65
6773 MORG HEN 230.00 KV
202 BRIGHTON 230.00 KV
228.51 -8.67 MVar
P = 3.00
6772 BASINGR 230.00 KV
232.30 -1.32 MVar
P = 2.06
607 SWEATT 230.00 KV
233.31 4.88 MVar
P = 11.90
208 OKECHOBE 69.00 KV
27.90 6.46 MVar
P = 47.61
865 SWEATTAP 69.00 KV
27.96 9.40 MVar
2.44 -0.26 MVar
1234 EISINGER TP 69.00 KV
2.44 -0.15 MVar
30.48 9.39 MVar
30.40 9.14 MVar
670 SHERMAN 1 69.00 KV
0.00 0.00 MVar
213 SHERMAN 69.00 KV
19.78 6.60 MVar
0.00 0.00 MVar
283 ARCADIA 69.00 KV
P = 35.24
342 CHARLOTE 230.00 KV
B = 108.50
1506 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
149.00
148.88
0.00
36.36
B = 93.60
1505 CHARLOTE1_TR 13.20 KV
284 CHARLOTE 69.00 KV
36.31
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV

page3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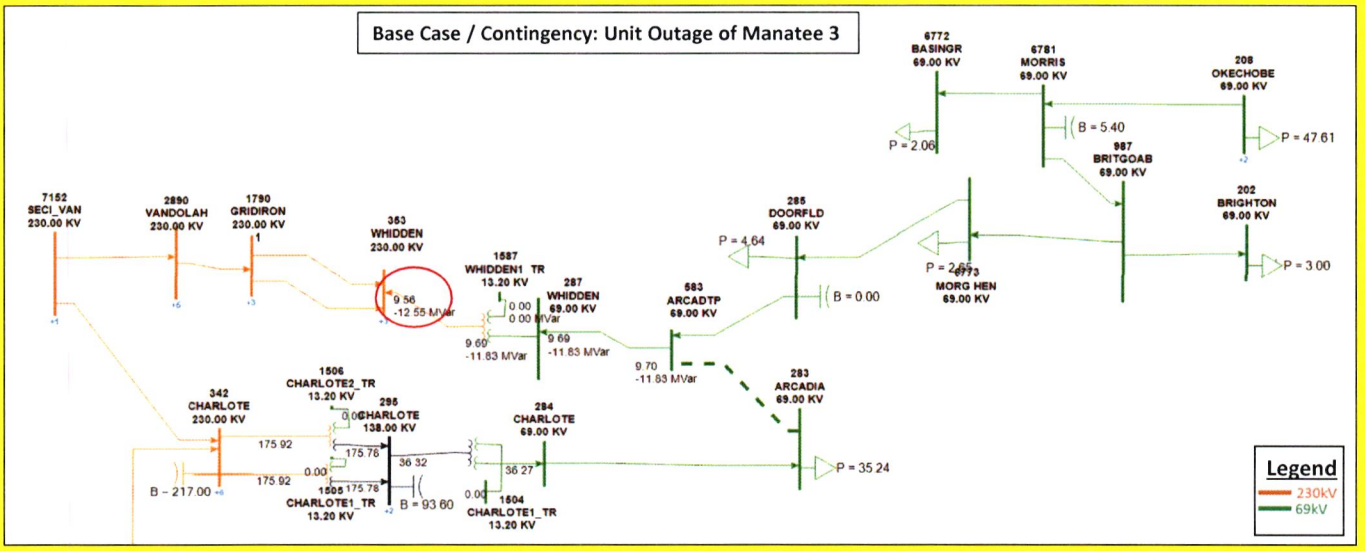
991140 FTDRUM_230 230.00 KV
222.24 26.20 MVar
6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
P = 2.06
B = 5.40
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
217.82 4.49 MVar
8.15 -9.50 MVar
1587 WHIDDEN_TR 13.20 KV
287 WHIDDEN 69.00 KV
0.00 0.00 MVar
6.31 -8.93 MVar
2.30 -5.92 MVar
285 DOORFLD 69.00 KV
P = 4.64
B = 0.00
6773 MORG HEN 69.00 KV
883 ARCADTP 69.00 KV
8.31 -8.93 MVar
283 ARCADIA 69.00 KV
P = 35.24
1606 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
342 CHARLOTE 230.00 KV
284 CHARLOTE 69.00 KV
149.15
149.04
36.36
36.31
0.00
B = 108.50
B = 93.60
1605 CHARLOTE1_TR 13.20 KV
1604 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV
Alt II / Contingency: Orange River-Ghost 500kV
353 WHIDDEN 230.00 KV
279.28 -20.26 MVar
6.27 -7.79 MVar
6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
P = 2.06
B = 5.40
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
6.39 -7.31 MVar
285 DOORFLD 69.00 KV
P = 4.64
B = 0.00
6773 MORG HEN 69.00 KV
883 ARCADTP 69.00 KV
283 ARCADIA 69.00 KV
P = 35.24
1606 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
342 CHARLOTE 230.00 KV
284 CHARLOTE 69.00 KV
149.36
149.24
36.36
36.31
B = 108.50
B = 93.60
1605 CHARLOTE1_TR 13.20 KV
1604 CHARLOTE1_TR 13.20 KV
1520 MARTN2 230.00 KV
286.25 35.01 MVar
P = 23.00
Legend
230kV
69kV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6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
P = 2.06
B = 5.40
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
9.56 -12.55 MVar
1587 WHIDDEN1_TR 13.20 KV
0.00 0.00 MVar
287 WHIDDEN 69.00 KV
9.69 -11.83 MVar
9.69 -11.83 MVar
583 ARCADTP 69.00 KV
9.70 -11.83 MVar
285 DOORFLD 69.00 KV
P = 4.64
B = 0.00
P = 2.65
6773 MORG HEN 69.00 KV
342 CHARLOTE 230.00 KV
1506 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
175.92
175.92
175.78
0.00
175.78
36.32
B = 217.00
B = 93.60
1505 CHARLOTE1_TR 13.20 KV
284 CHARLOTE 69.00 KV
36.27
0.00
1504 CHARLOTE1_TR 13.20 KV
283 ARCADIA 69.00 KV
P = 35.24
Legend
230kV
69kV
Project / Contingency: Unit Outage of Manatee 3
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
206.48 -35.37 MVar
0.12 0.32 MVar
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
0.00 0.03 MVar
0.00 -0.02 MVar
583 ARCADTP 69.00 KV
0.00 0.00 MVar
285 DOORFLD 230.00 KV
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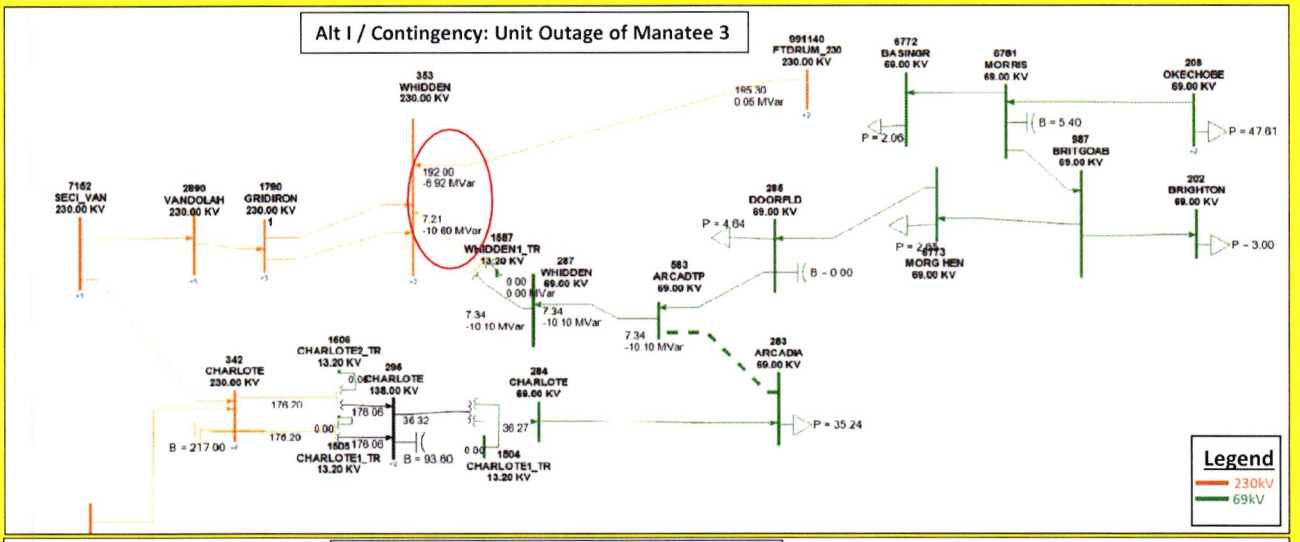
B = 0.00
215.11 -25.16 MVar
P = 2.65
6773 MORG HEN 230.00 KV
202 BRIGHTON 230.00 KV
215.76 -25.20 MVar
P = 3.00
6772 BASINGR 230.00 KV
607 SWEATT 230.00 KV
221.47 222.38 -20.97 -60.04 MVar
P = 11.90
P = 2.06
208 OKECHOBE 69.00 KV
27.90 6.46 MVar
P = 47.61
865 SWEATTAP 69.00 KV
1234 ELSINGER TP 69.00 KV
2.44 -0.25 MVar
2.44 -0.15 MVar
27.90 9.30 MVar
30.47 9.37 MVar
30.40 0.13 MVar
670 SHERMAN1 69.00 KV
0.00 0.00 MVar
213 SHERMAN 69.00 KV
19.76 6.59 MVar
0.00 0.00 MVar
342 CHARLOTE 230.00 KV
1506 CHARLOTE2_TR 13.20 KV
295 CHARLOTE 138.00 KV
176.30
175.55
176.09
0.00
175.55
36.32
B = 217.00
B = 93.60
1505 CHARLOTE1_TR 13.20 KV
284 CHARLOTE 69.00 KV
35.27
0.00
1504 CHARLOTE1_TR 13.20 KV
283 ARCADIA 69.00 KV
P = 35.24
Legend
230kV
69kV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6772 BASINGR 69.00 KV
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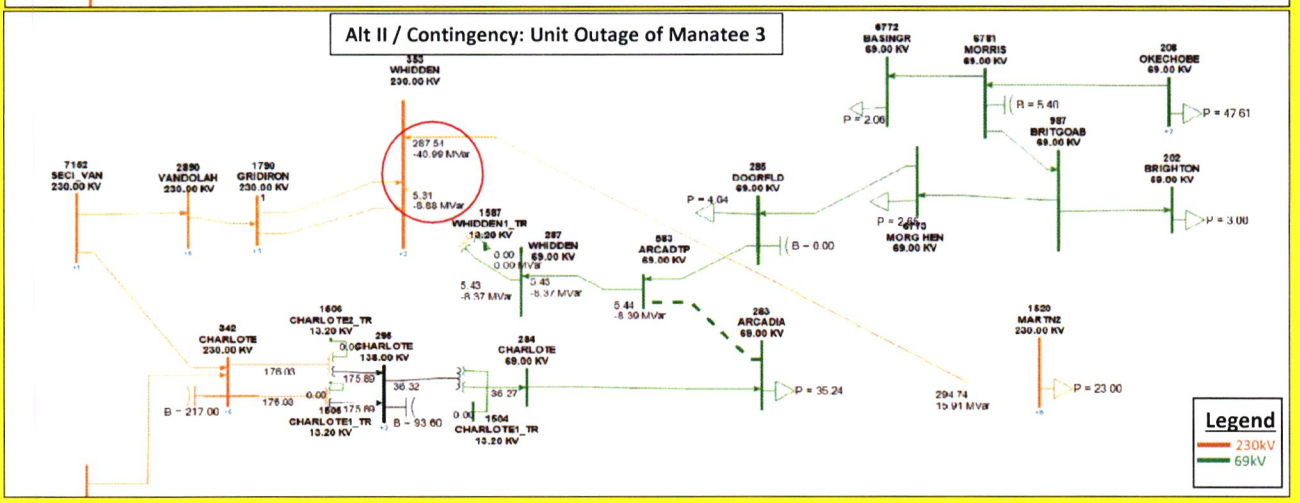
208 OKECHOBE 69.00 KV
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
7162 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
285 DOORFLD 69.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
583 ARCADTP 69.00 KV
283 ARCADIA 69.00 KV
6773 MORG HEN 69.00 KV
342 CHARLOTE 230.00 KV
1606 CHARLOTE2_TR 13.20 KV
296 CHARLOTE 138.00 KV
284 CHARLOTE 69.00 KV
1505 CHARLOTE1_TR 13.20 KV
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV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6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
7162 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
285 DOORFLD 69.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
583 ARCADTP 69.00 KV
283 ARCADIA 69.00 KV
6773 MORG HEN 69.00 KV
1520 MARTNZ 230.00 KV
342 CHARLOTE 230.00 KV
1606 CHARLOTE2_TR 13.20 KV
296 CHARLOTE 138.00 KV
284 CHARLOTE 69.00 KV
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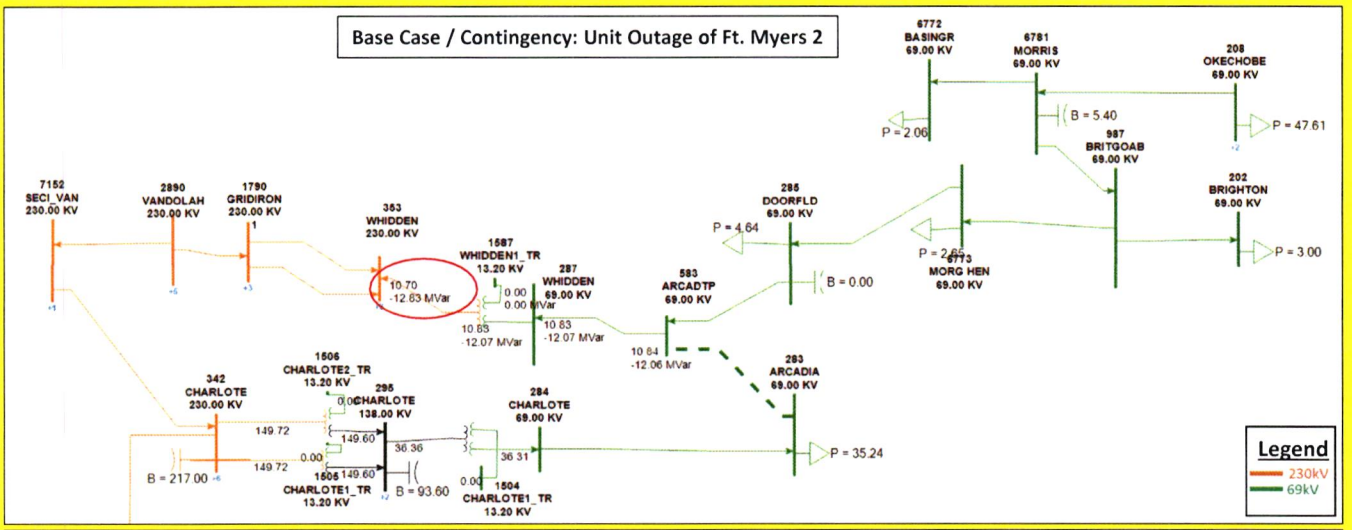
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV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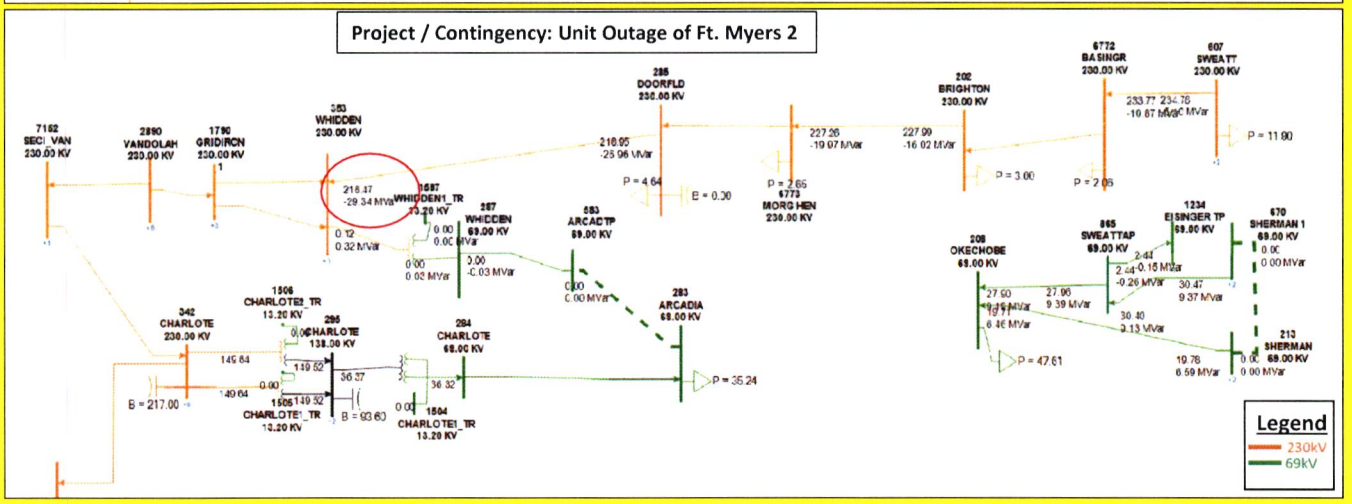
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
583 ARCADTP 69.00 KV
285 DOORFLD 69.00 KV
6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
6773 MORG HEN 69.00 KV
283 ARCADIA 69.00 KV
284 CHARLOTE 69.00 KV
342 CHARLOTE 230.00 KV
295 CHARLOTE 138.00 KV
1506 CHARLOTE2_TR 13.20 KV
1505 CHARLOTE1_TR 13.20 KV
1504 CHARLOTE1_TR 13.20 KV
10.70 -12.63 MVar
10.85 -12.07 MVar
10.83 -12.07 MVar
10.84 -12.06 MVar
P = 4.64
B = 0.00
P = 2.66
B = 5.40
P = 47.61
P = 3.00
P = 35.24
149.72
149.60
36.36
36.31
B = 217.00
B = 93.60
Legend
230kV
69kV


Project / Contingency: Unit Outage of Ft. Myers 2
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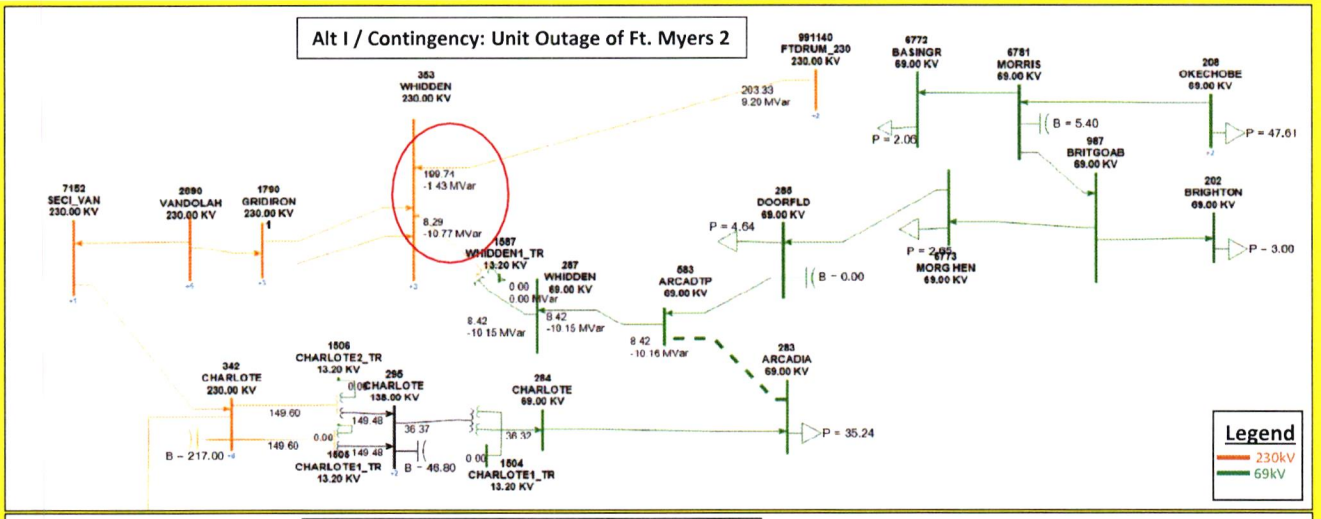
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV
353 WHIDDEN 230.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
583 ARCADTP 69.00 KV
285 DOORFLD 230.00 KV
6772 BASINGR 230.00 KV
607 SWEATT 230.00 KV
202 BRIGHTON 230.00 KV
6773 MORG HEN 230.00 KV
283 ARCADIA 69.00 KV
284 CHARLOTE 69.00 KV
342 CHARLOTE 230.00 KV
295 CHARLOTE 138.00 KV
1506 CHARLOTE2_TR 13.20 KV
1505 CHARLOTE1_TR 13.20 KV
1504 CHARLOTE1_TR 13.20 KV
208 OKECHOBE 69.00 KV
865 SWEATTAP 69.00 KV
1234 EISINGER TP 69.00 KV
670 SHERMAN 1 69.00 KV
213 SHERMAN 69.00 KV
218.47 -29.34 MVar
216.95 -25.96 MVar
227.26 -19.97 MVar
227.99 -16.02 MVar
233.77 234.76 -19.87 MVar
P = 4.64
B = 0.00
P = 2.65
P = 3.00
P = 2.06
P = 11.90
P = 47.61
P = 35.24
B = 217.00
B = 93.60
Legend
230kV
69kV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203.33 9.20 MVar
6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
P = 2.00
B = 5.40
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
353 WHIDDEN 230.00 KV
199.74 -1.43 MVar
8.29 -10.77 MVar
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV 1
285 DOORFLD 69.00 KV
P = 4.64
B = 0.00
6773 MORG HEN 69.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
0.00 0.00 MVar
8.42 -10.15 MVar
583 ARCADTP 69.00 KV
8.42 -10.16 MVar
283 ARCADIA 69.00 KV
P = 35.24
1506 CHARLOTE2_TR 13.20 KV
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295 CHARLOTE 138.00 KV
284 CHARLOTE 69.00 KV
149.60
149.48
36.37
36.32
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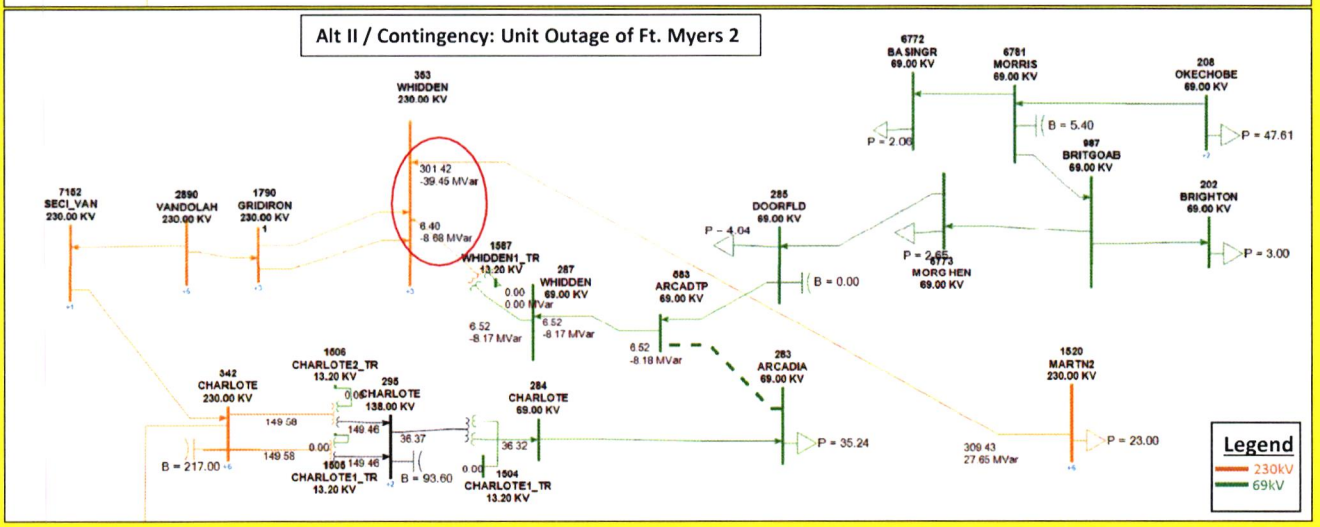
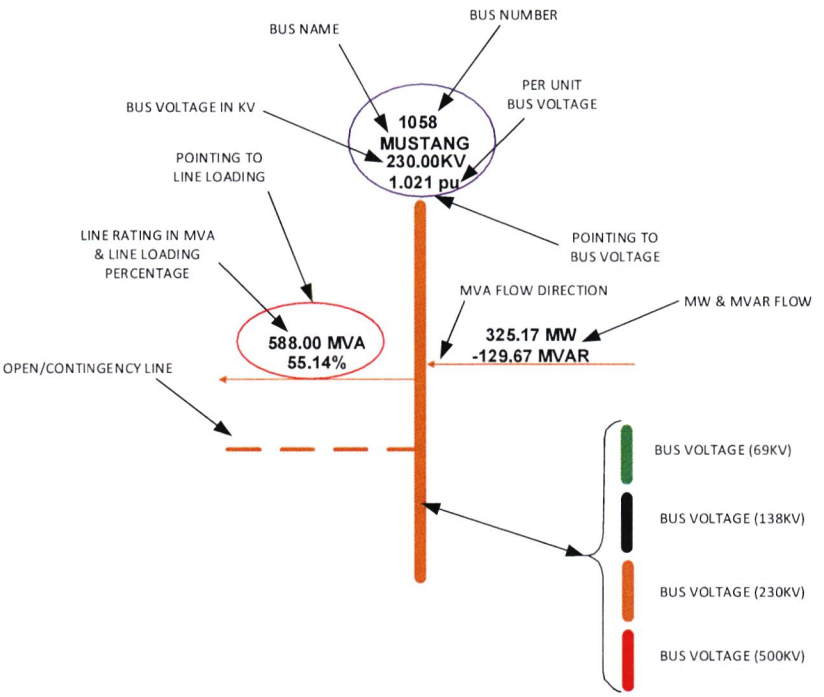
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV


Alt II / Contingency: Unit Outage of Ft. Myers 2
6772 BASINGR 69.00 KV
6781 MORRIS 69.00 KV
208 OKECHOBE 69.00 KV
P = 2.00
B = 5.40
P = 47.61
987 BRITGOAB 69.00 KV
202 BRIGHTON 69.00 KV
P = 3.00
353 WHIDDEN 230.00 KV
301.42 -39.45 MVar
6.40 -8.68 MVar
7152 SECI_VAN 230.00 KV
2890 VANDOLAH 230.00 KV
1790 GRIDIRON 230.00 KV 1
285 DOORFLD 69.00 KV
P = 4.04
B = 0.00
6773 MORG HEN 69.00 KV
1587 WHIDDEN1_TR 13.20 KV
287 WHIDDEN 69.00 KV
0.00 0.00 MVar
6.52 -8.17 MVar
583 ARCADTP 69.00 KV
6.52 -8.18 MVar
283 ARCADIA 69.00 KV
P = 35.24
1520 MARTN2 230.00 KV
309.43 27.65 MVar
P = 23.00
1506 CHARLOTE2_TR 13.20 KV
342 CHARLOTE 230.00 KV
295 CHARLOTE 138.00 KV
284 CHARLOTE 69.00 KV
149.58
149.46
36.37
36.32
B = 217.00
B = 93.60
1505 CHARLOTE1_TR 13.20 KV
1504 CHARLOTE1_TR 13.20 KV
Legend
230kV
69kV

Appendix B

Load Flow Diagrams / Mitigate Potential System Limitations

Load Flow Diagram Key



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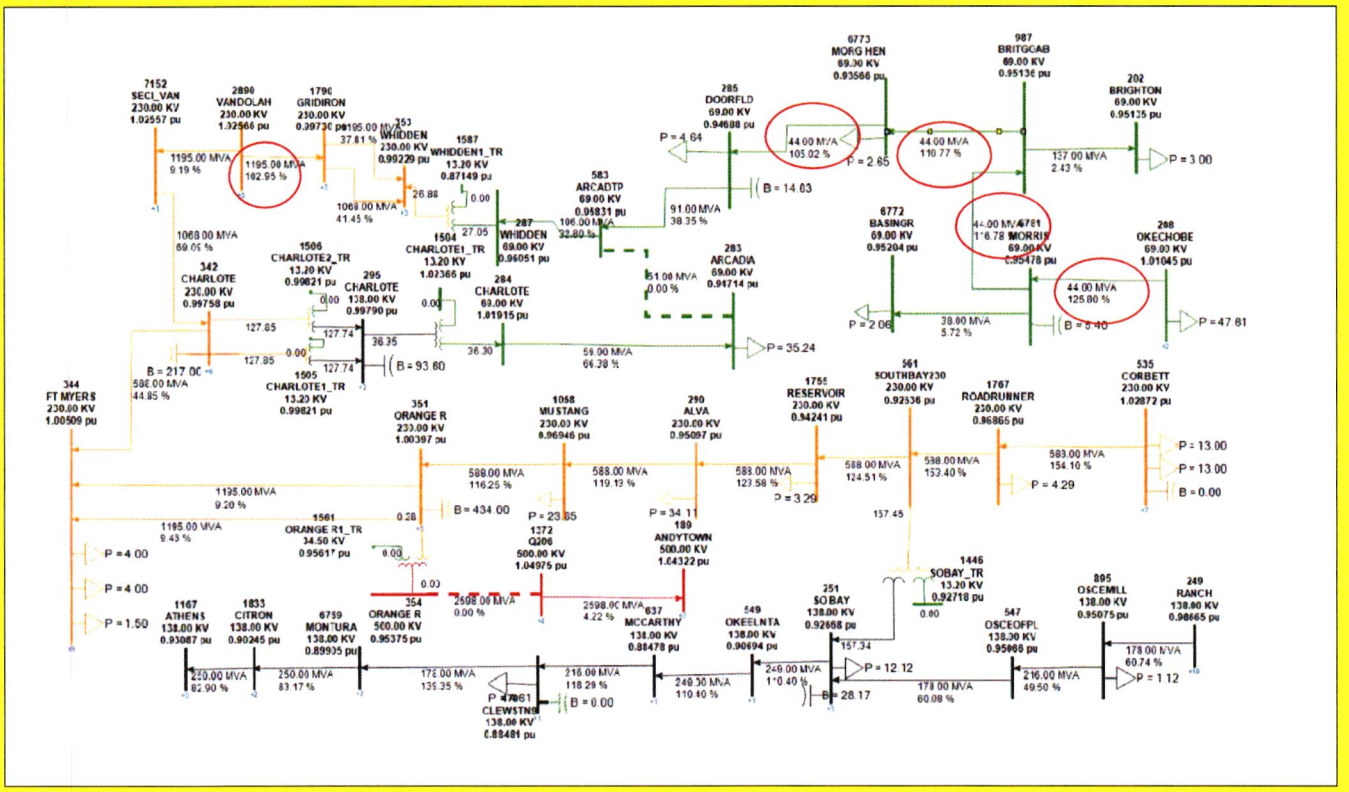
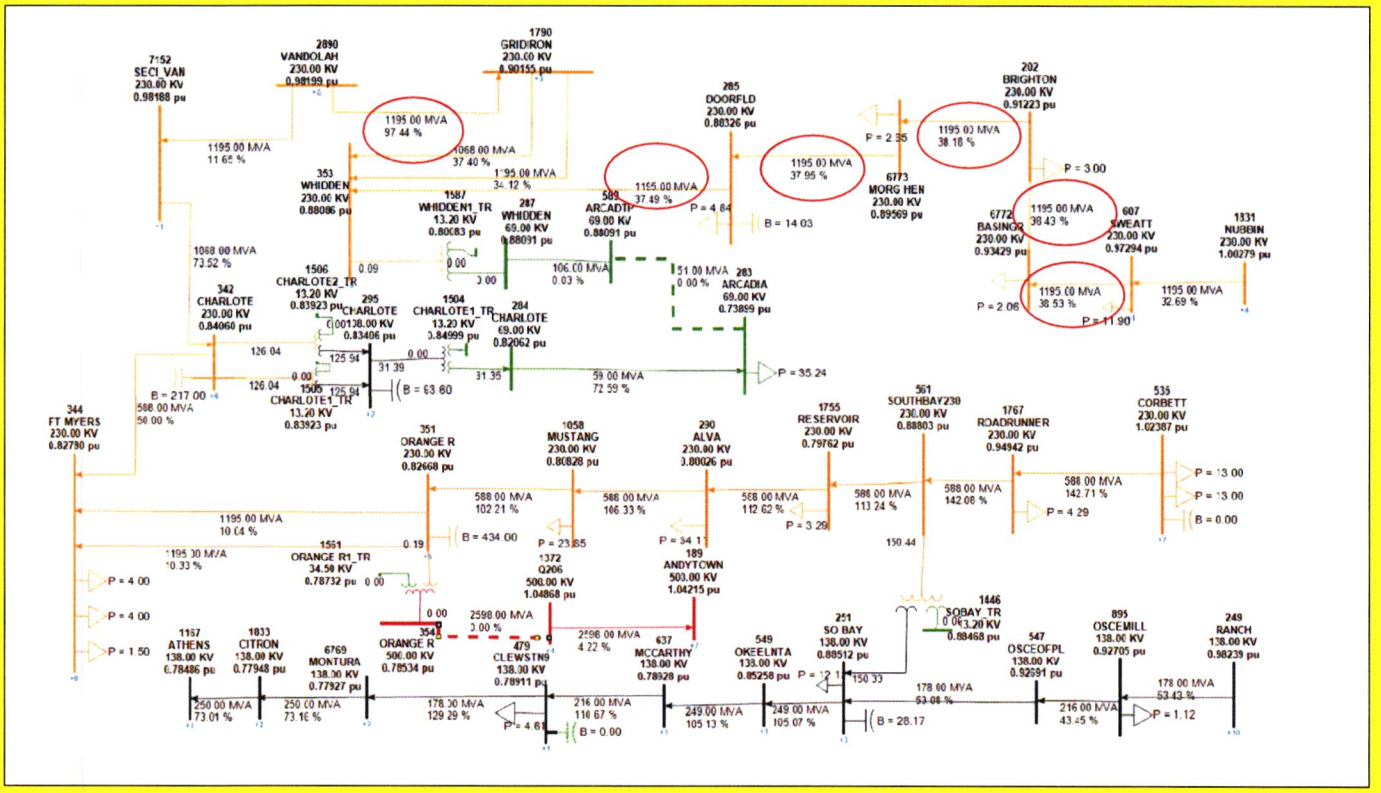
Base Case / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Okeechobee-Morris 69kV – 126%
Morris-Brighton 69kV – 117%
Brighton-Morgan Hen 69kV – 111%
Morgan Hen-Doorfield 69kV – 105%
Gridiron-Vandolah 230kV – 103%

Legend
500kV
230kV
138kV
69kV



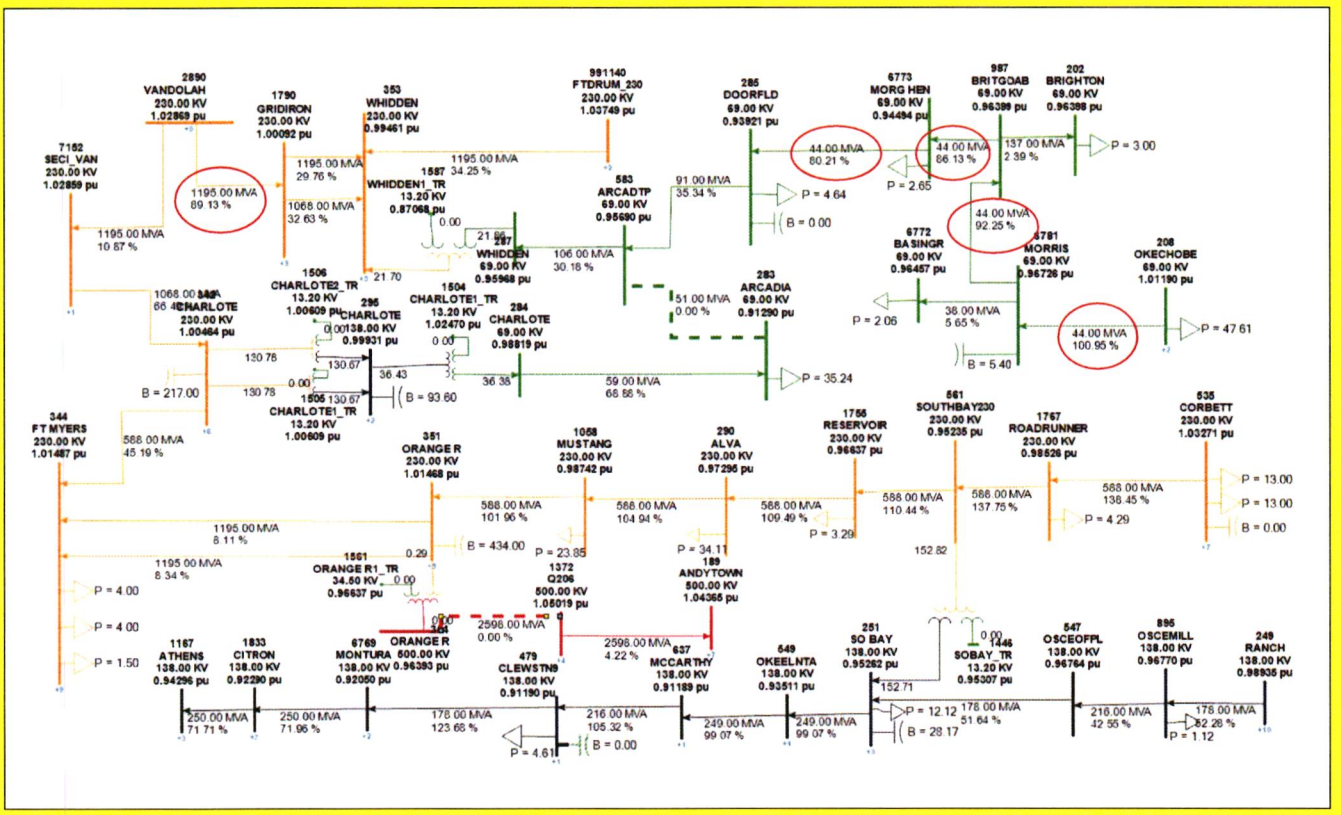
Project / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: No Branch Violations

Legend
500kV
230kV
138kV
69kV

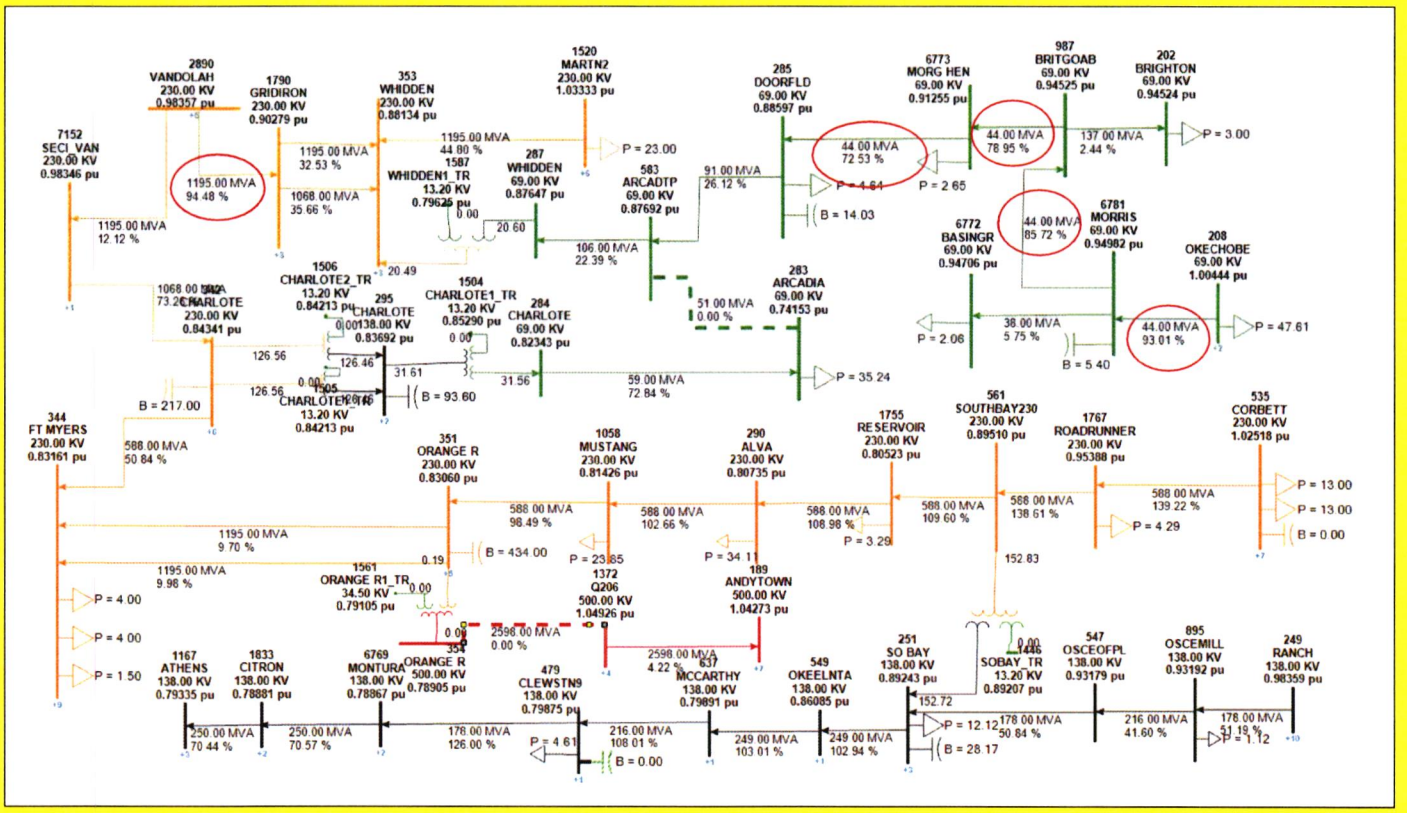


Alt I / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Okeechobee-Morris 69kV – 101%

Legend
500kV
230kV
138kV
69kV

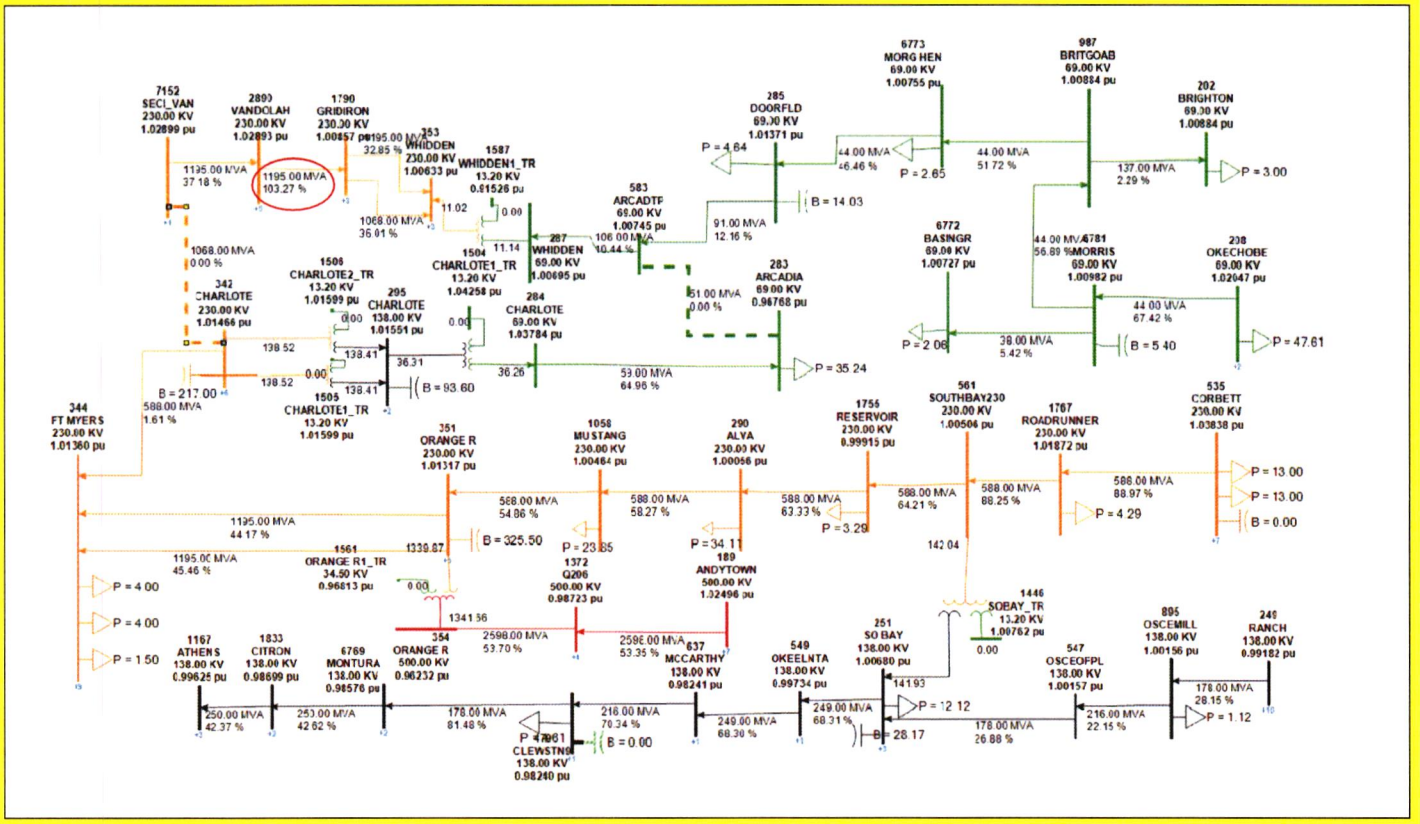


Alt II / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: No Branch Violations



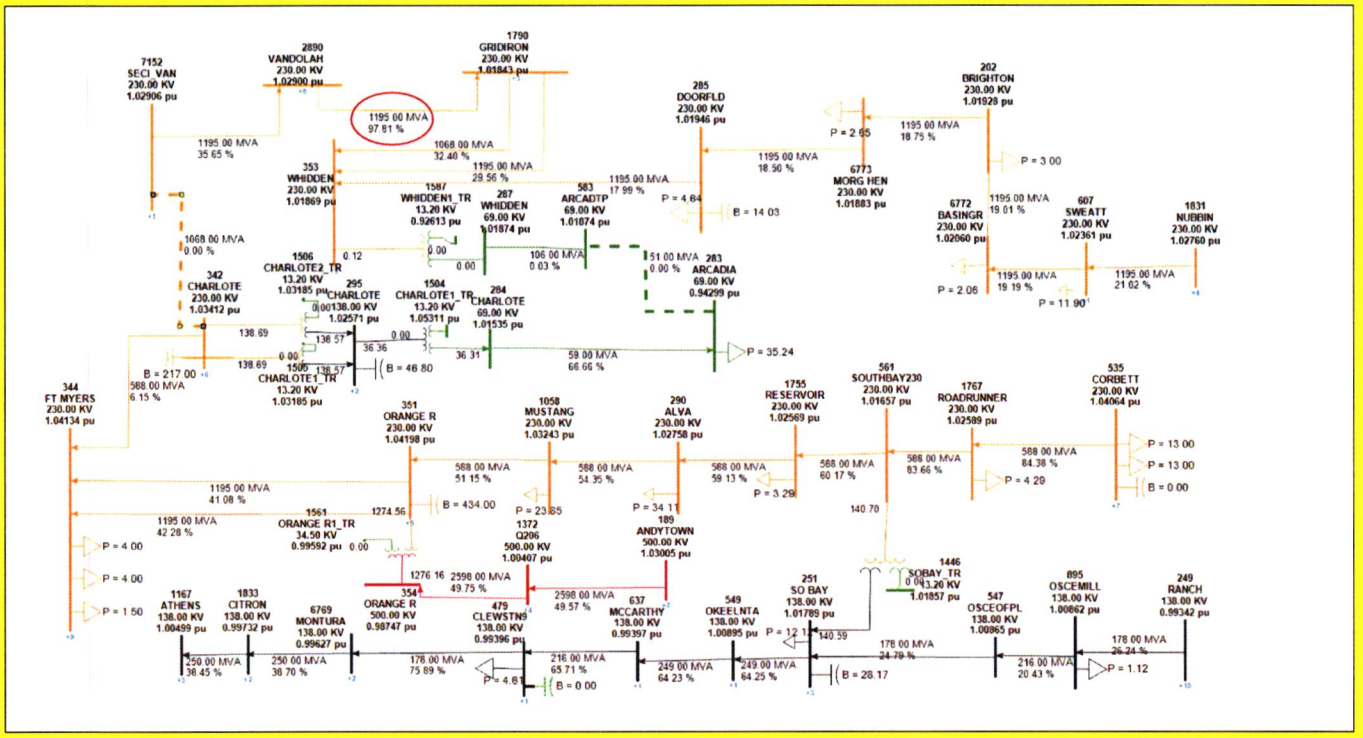
Base Case / Contingency:
Ft. Myers Unit 2 Outage + Charlotte-Vandolah 230kV
Branch Overload: Gridiron-Vandolah 230kV – 103%

Legend
500kV
230kV
138kV
69kV



Project / Contingency:
Ft. Myers Unit 2 Outage + Charlotte-Vandolah 230kV
Branch Overload: No Branch Violations

Legend
- 500kV
- 230kV
- 138kV
- 69kV



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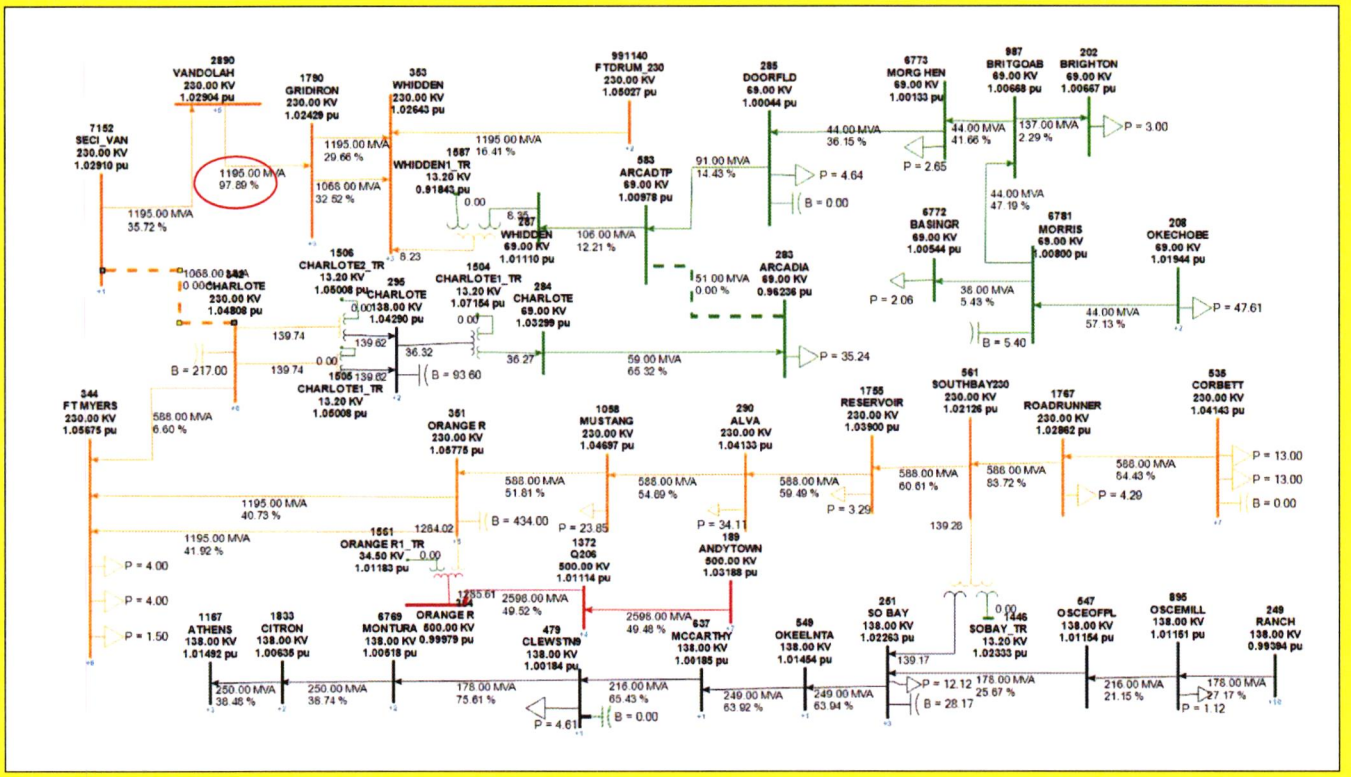
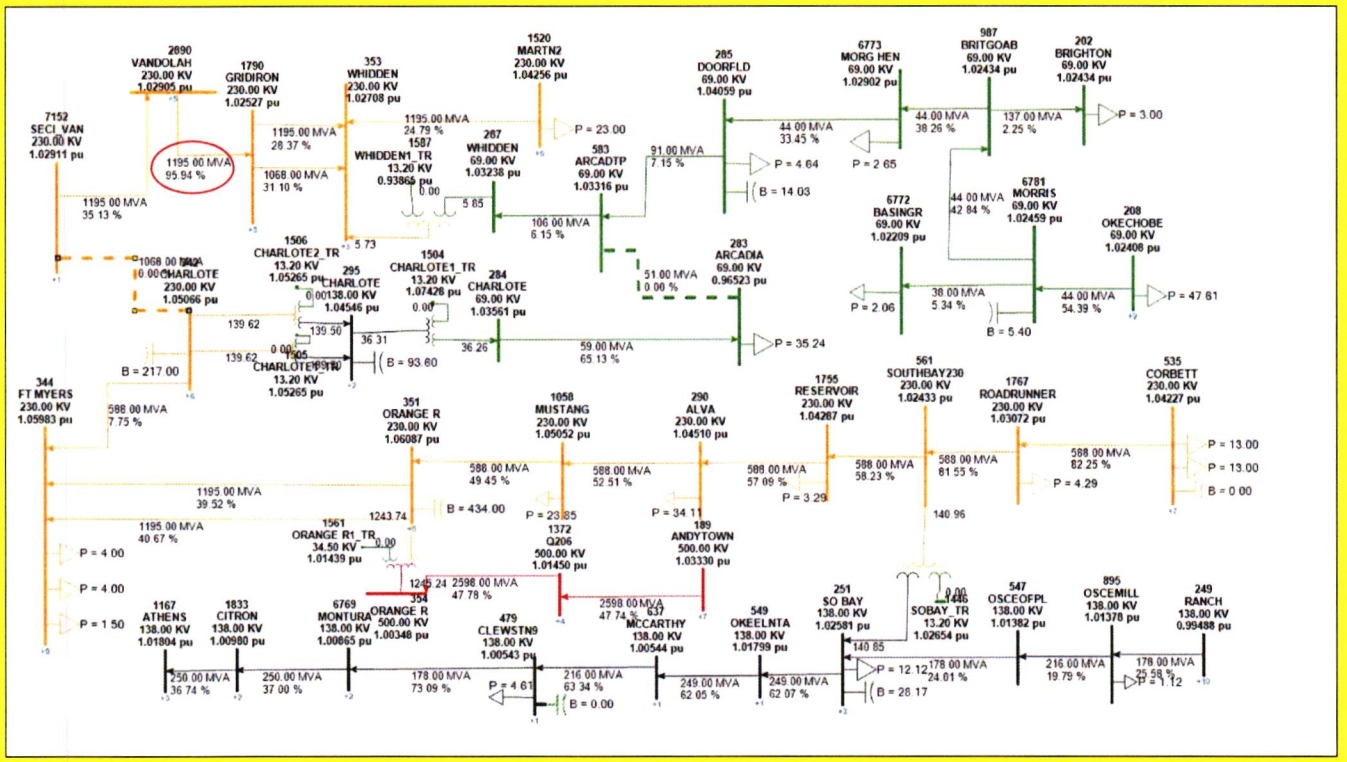
Alt I / Contingency:
Ft. Myers Unit 2 Outage + Charlotte-Vandolah 230kV
Branch Overload: No Branch Violations

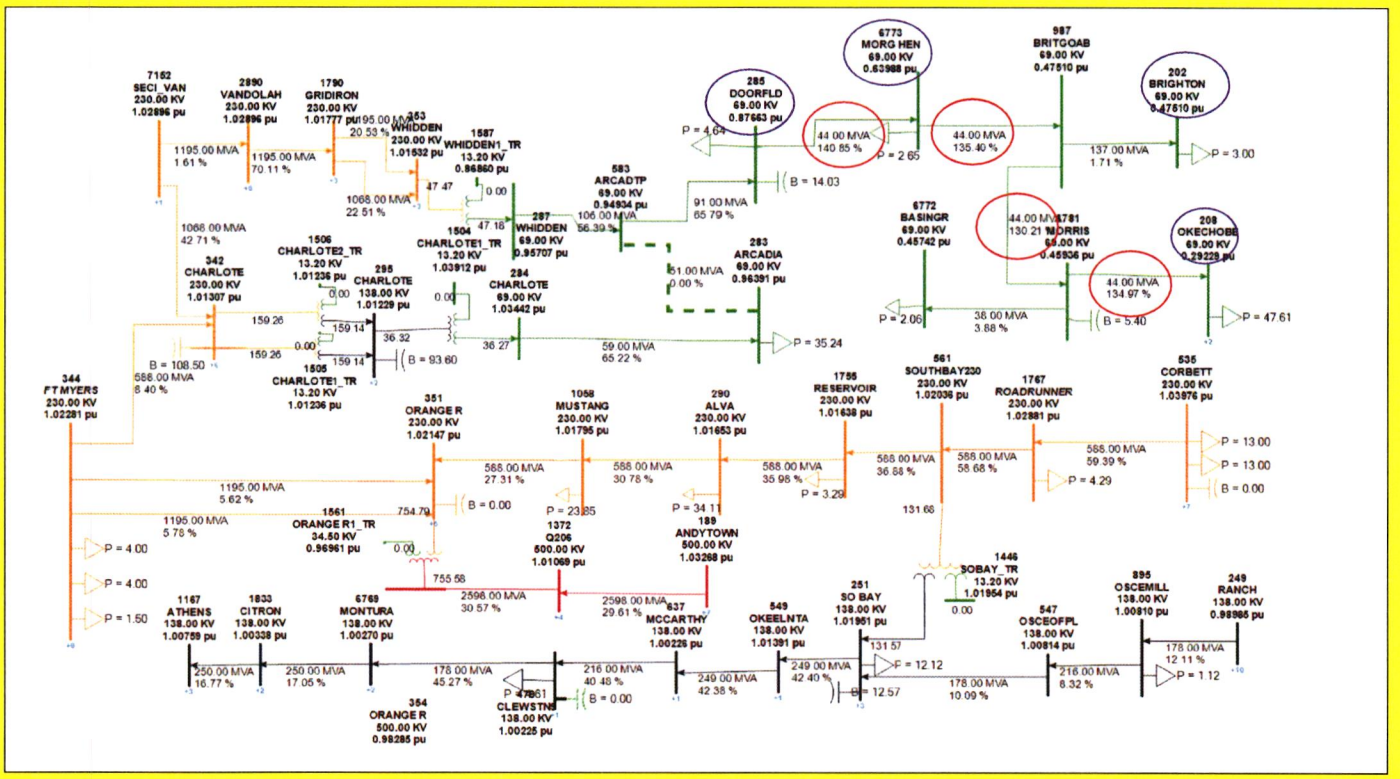


Alt II / Contingency:
Ft. Myers Unit 2 Outage + Charlotte-Vandolah 230kV
Branch Overload: No Branch Violations



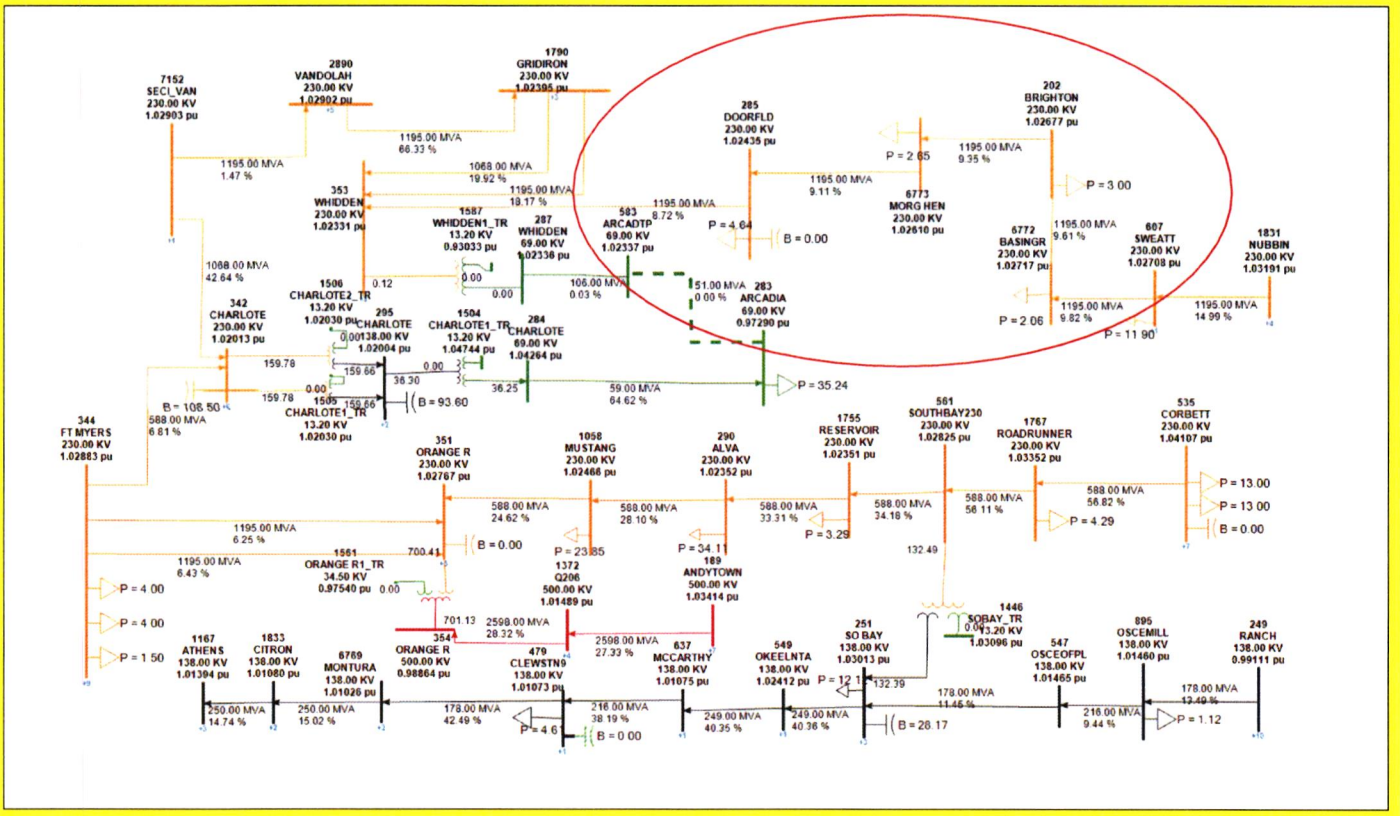
Base Case / Contingency:
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV
Voltage Collapse:
Doorfield 69kV – NonConv
Morgan Hen 69kV – NonConv
Brighton 69kV – NonConv
Morris 69kV – NonConv

Legend
500kV
230kV
138kV
69kV



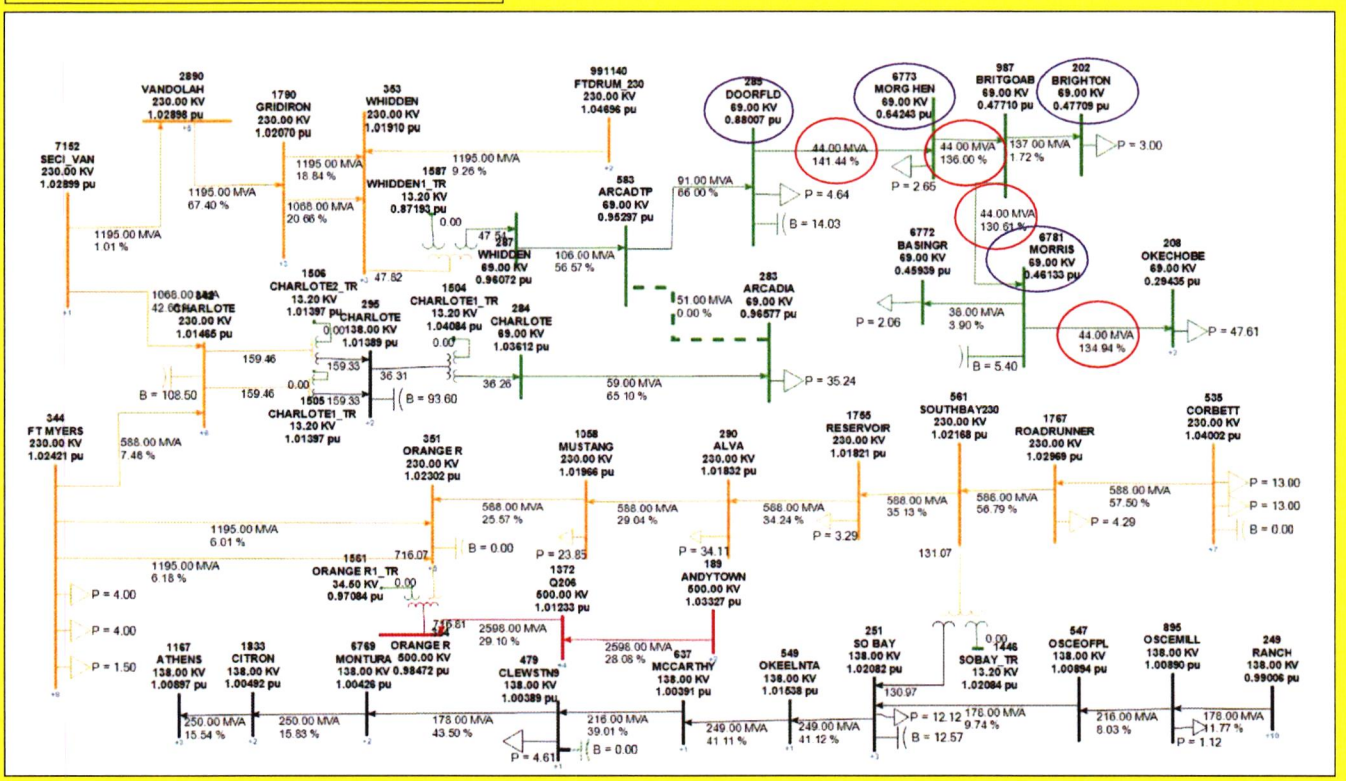
Project / Contingency:
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV
Branch Overload: No Branch Violations
No Voltage Violations

Legend
500kV
230kV
138kV
69kV



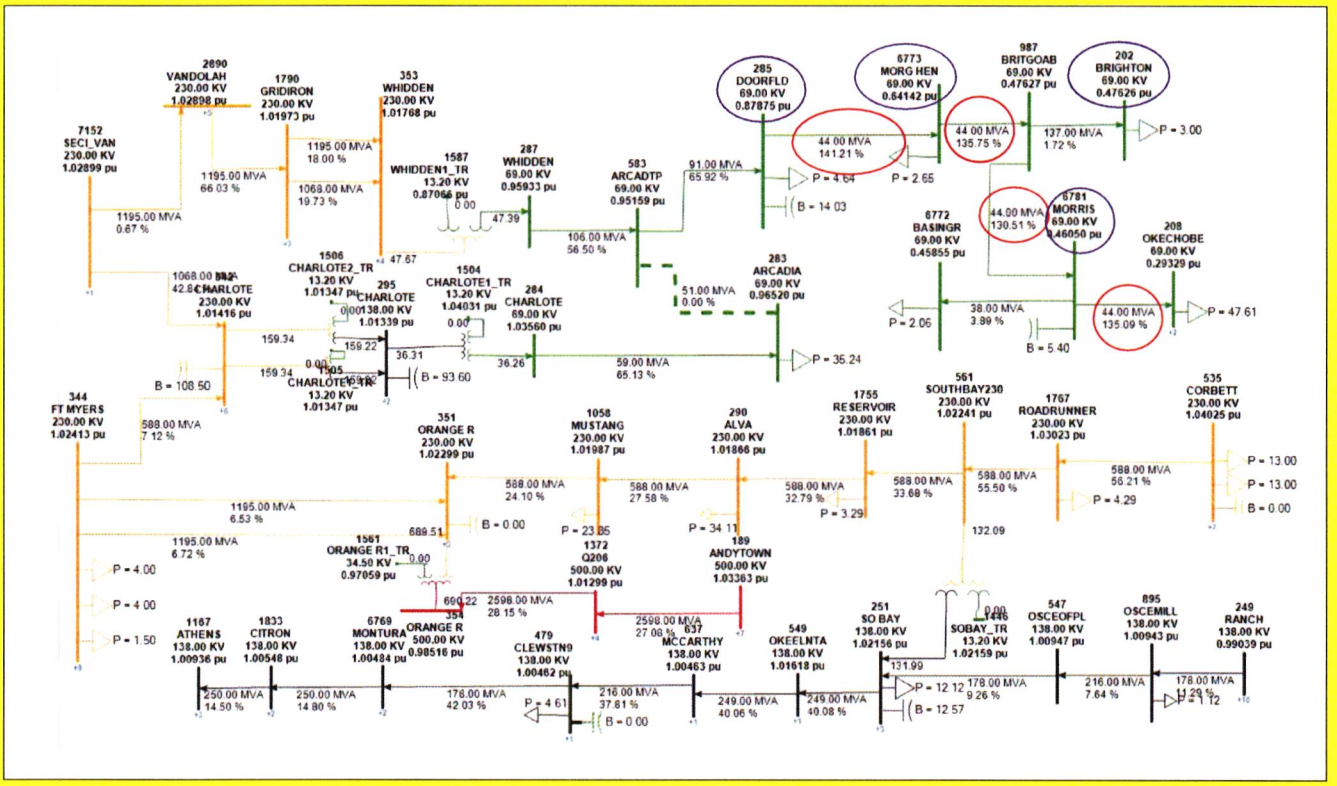
Alt I / Contingency:
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV
Voltage Collapse:
Doorfield 69kV – NonConv
Morgan Hen 69kV – NonConv
Brighton 69kV – NonConv
Morris 69kV – NonConv

Legend
500kV
230kV
138kV
69kV



Alt II / Contingency:
Treasure-Allapattah 230kV + Sherman-Nubbin 230kV
Voltage Collapse:
Doorfield 69kV – NonConv
Morgan Hen 69kV – NonConv
Brighton 69kV – NonConv
Morris 69kV – NonConv

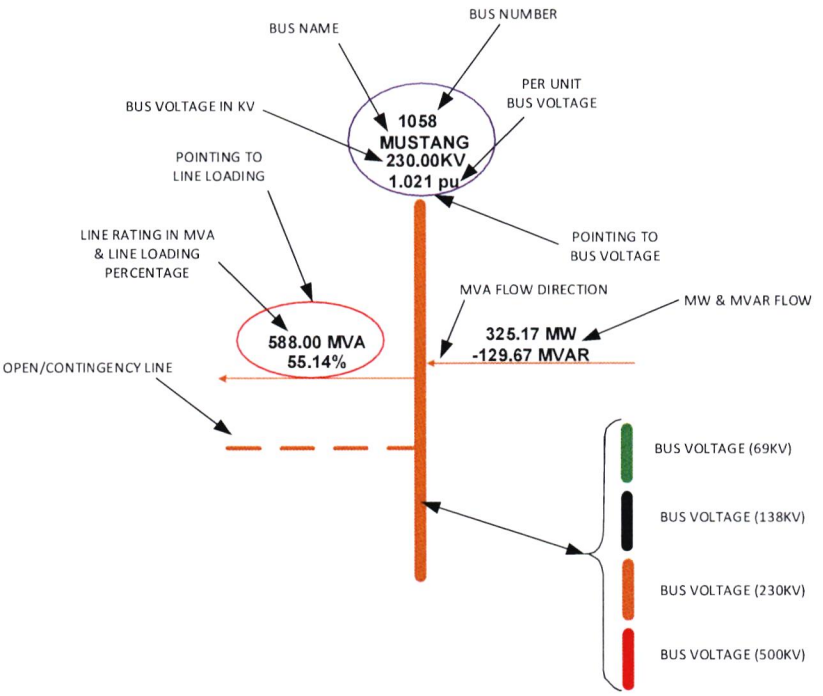
Legend
500kV
230kV
138kV
69kV



Appendix C

Load Flow Diagrams / Reduce Line Loading

Load Flow Diagram Key



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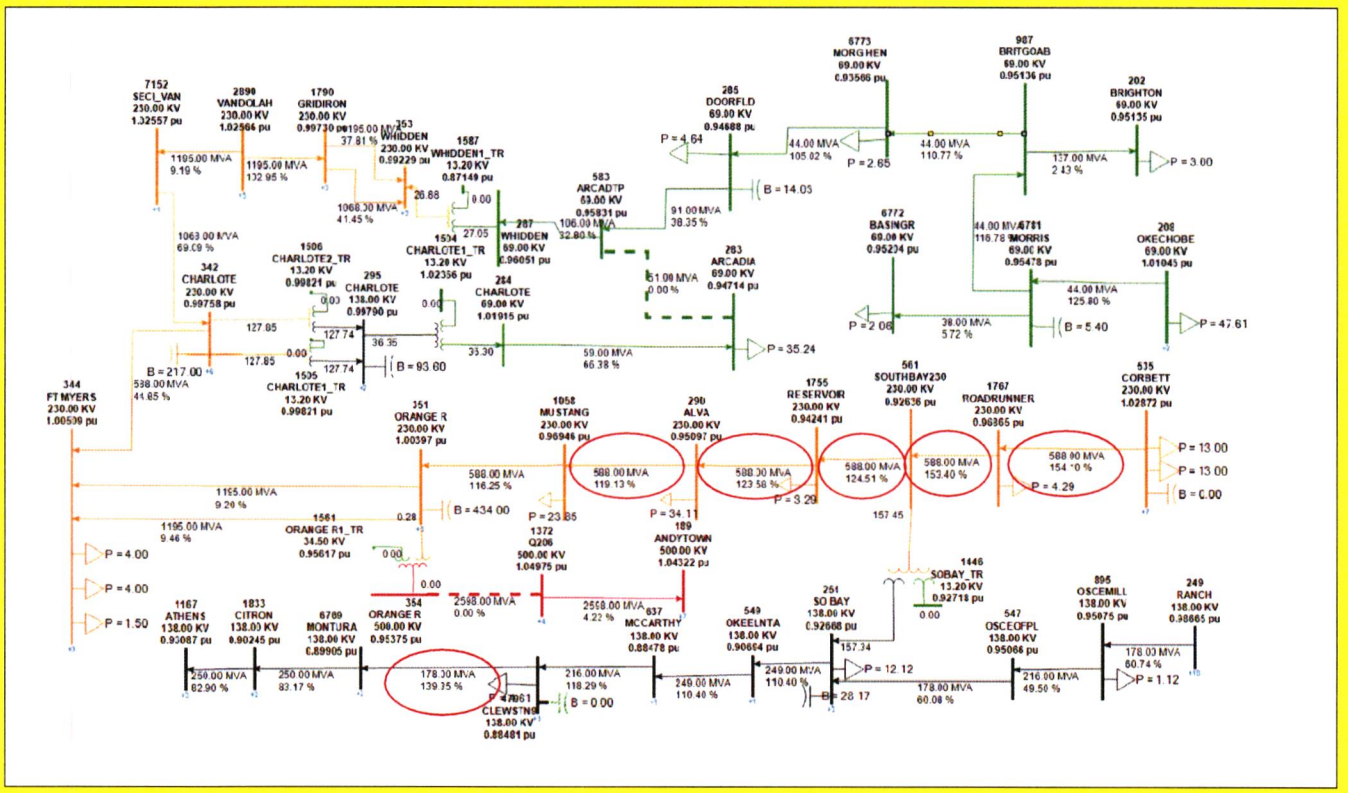
Base Case / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Mustang-Alva 230kV – 119%
Alva-Reservoir 230kV – 124%
Reservoir-South Bay 230kV – 125%
South Bay-Roadrunner 230kV– 153%
Roadrunner-Corbett 230kV – 154%
Clewiston-Montura 138kV – 139%

Legend
500kV
230kV
138kV
69kV



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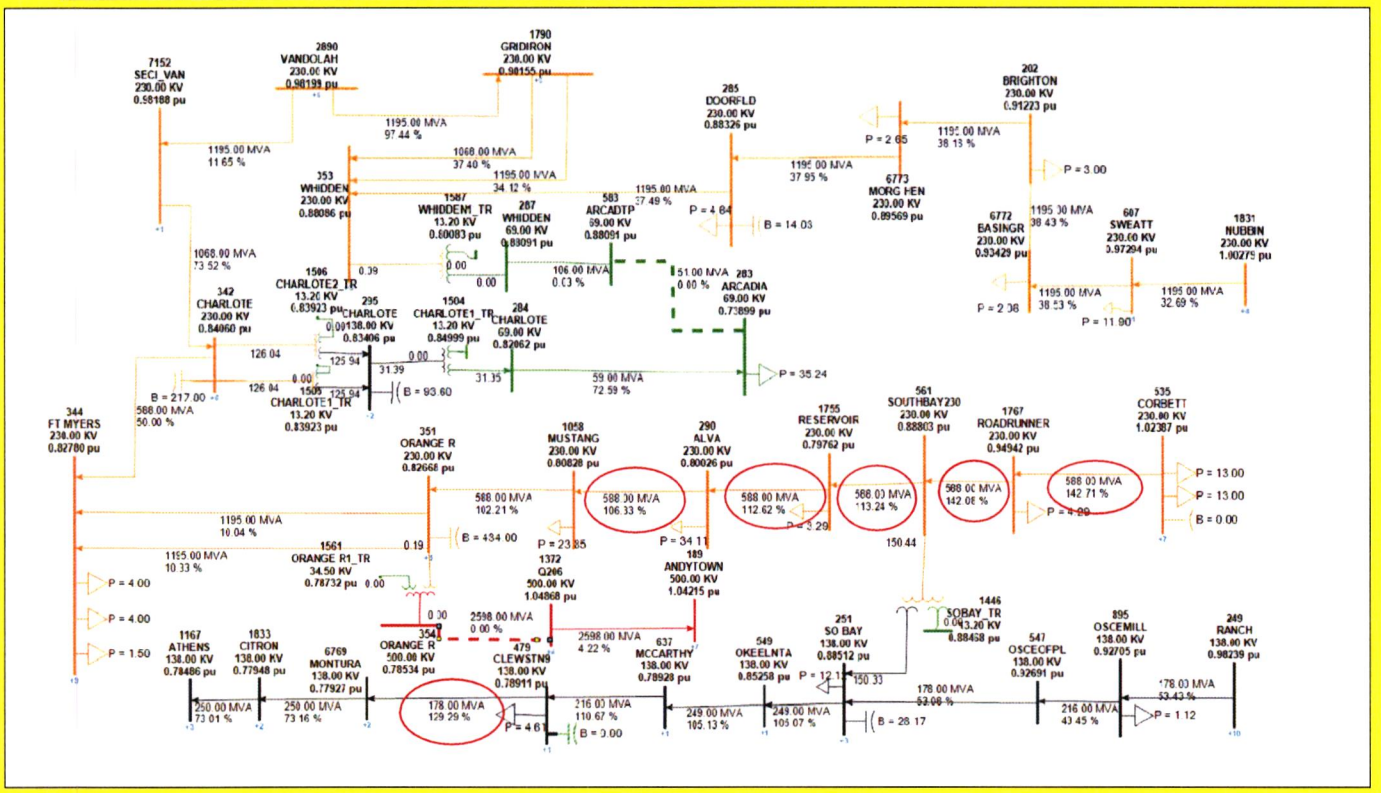
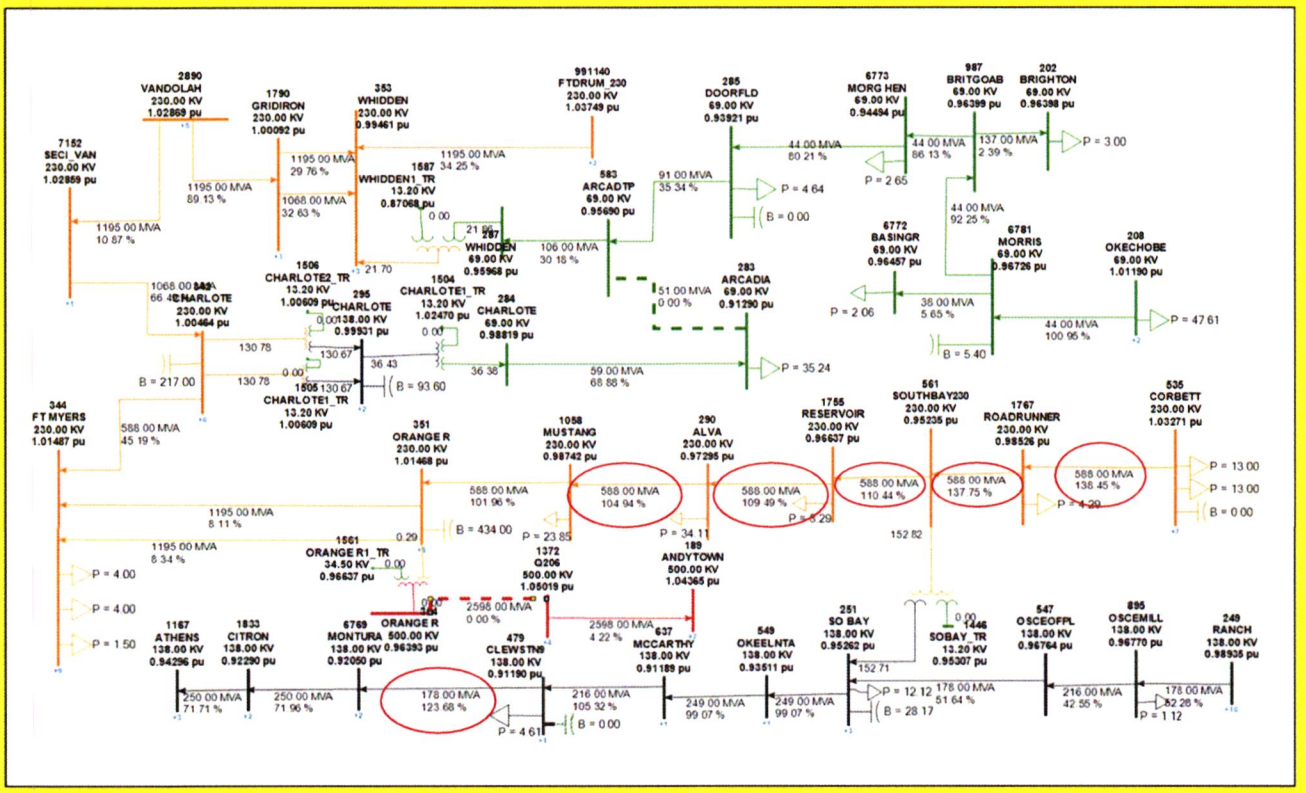
Project / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Mustang-Alva 230kV – 106%
Alva-Reservoir 230kV – 113%
Reservoir-South Bay 230kV – 113%
South Bay-Roadrunner 230kV – 142%
Roadrunner-Corbett 230kV – 143%
Clewiston-Montura 138kV – 129%

Legend
500kV
230kV
138kV
69kV

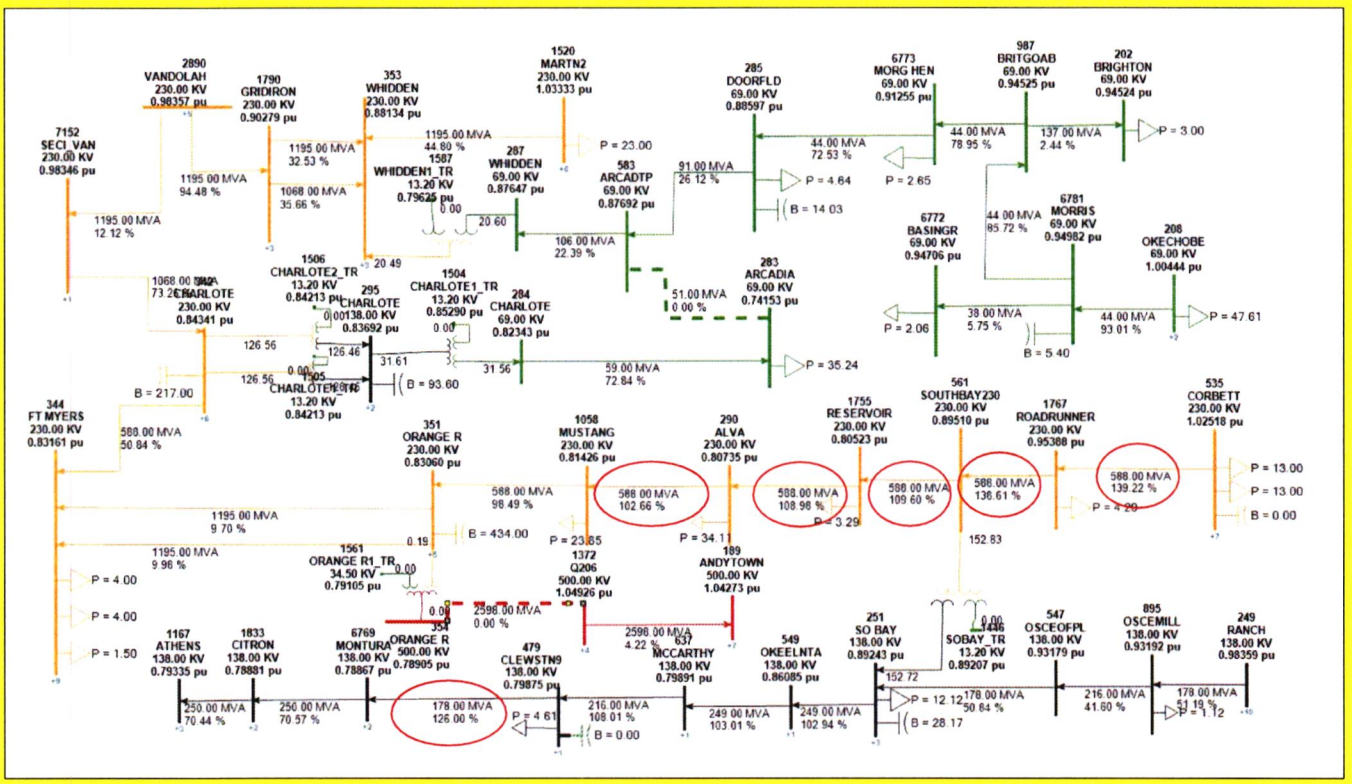


Alt I / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Mustang-Alva 230kV – 105%
Alva-Reservoir 230kV – 109%
Reservoir-South Bay 230kV – 110%
South Bay-Roadrunner 230kV – 138%
Roadrunner-Corbett 230kV – 138%
Clewiston-Montura 138kV – 124%

Legend
500kV
230kV
138kV
69kV

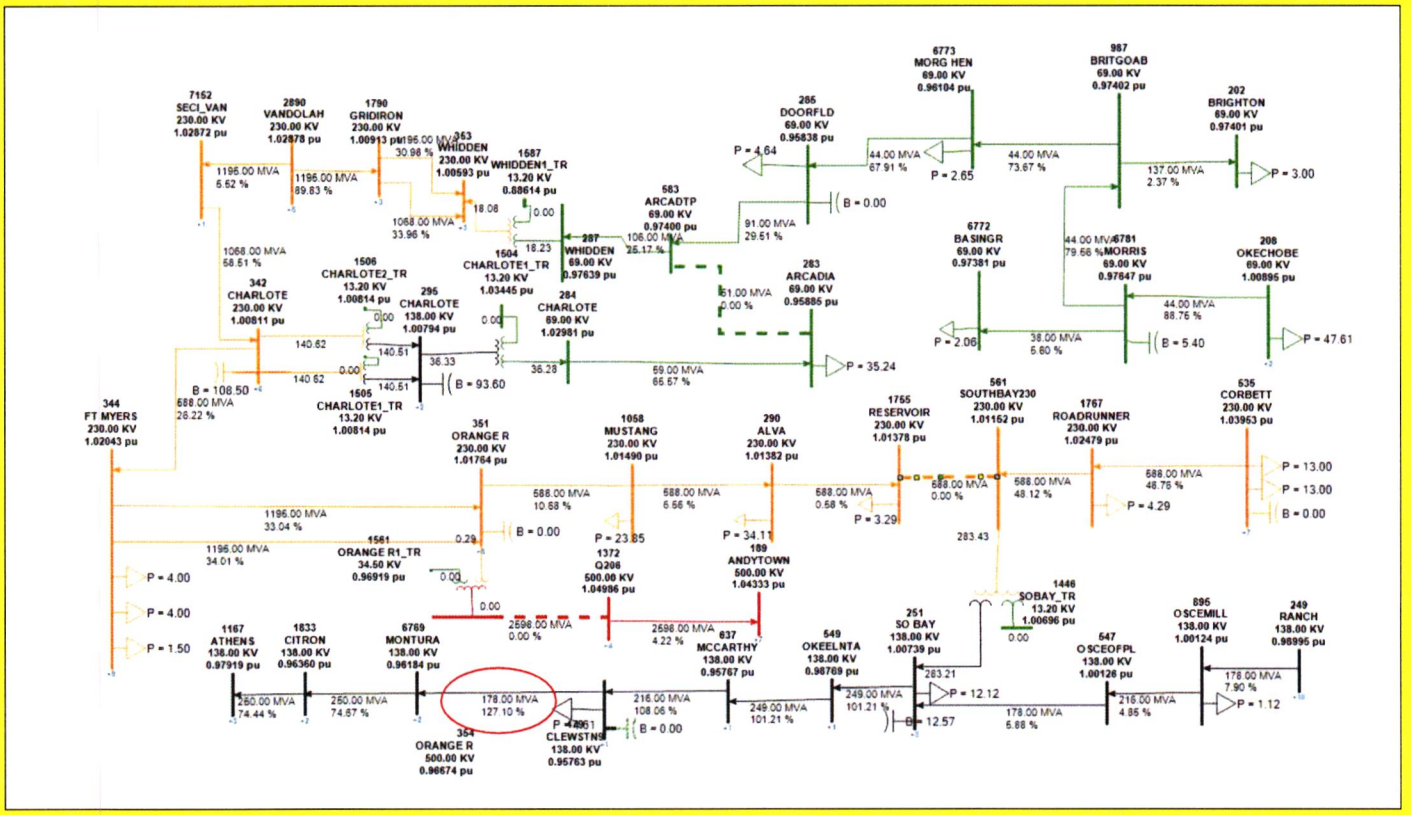


Alt II / Contingency:
Ft. Myers Unit 2 Outage + Orange River-Ghost 500kV
Branch Overloads: Mustang-Alva 230kV – 103%
Alva-Reservoir 230kV – 109%
Reservoir-South Bay 230kV – 110%
South Bay-Roadrunner 230kV – 139%
Roadrunner-Corbett 230kV – 139%
Clewiston-Montura 138kV – 126%



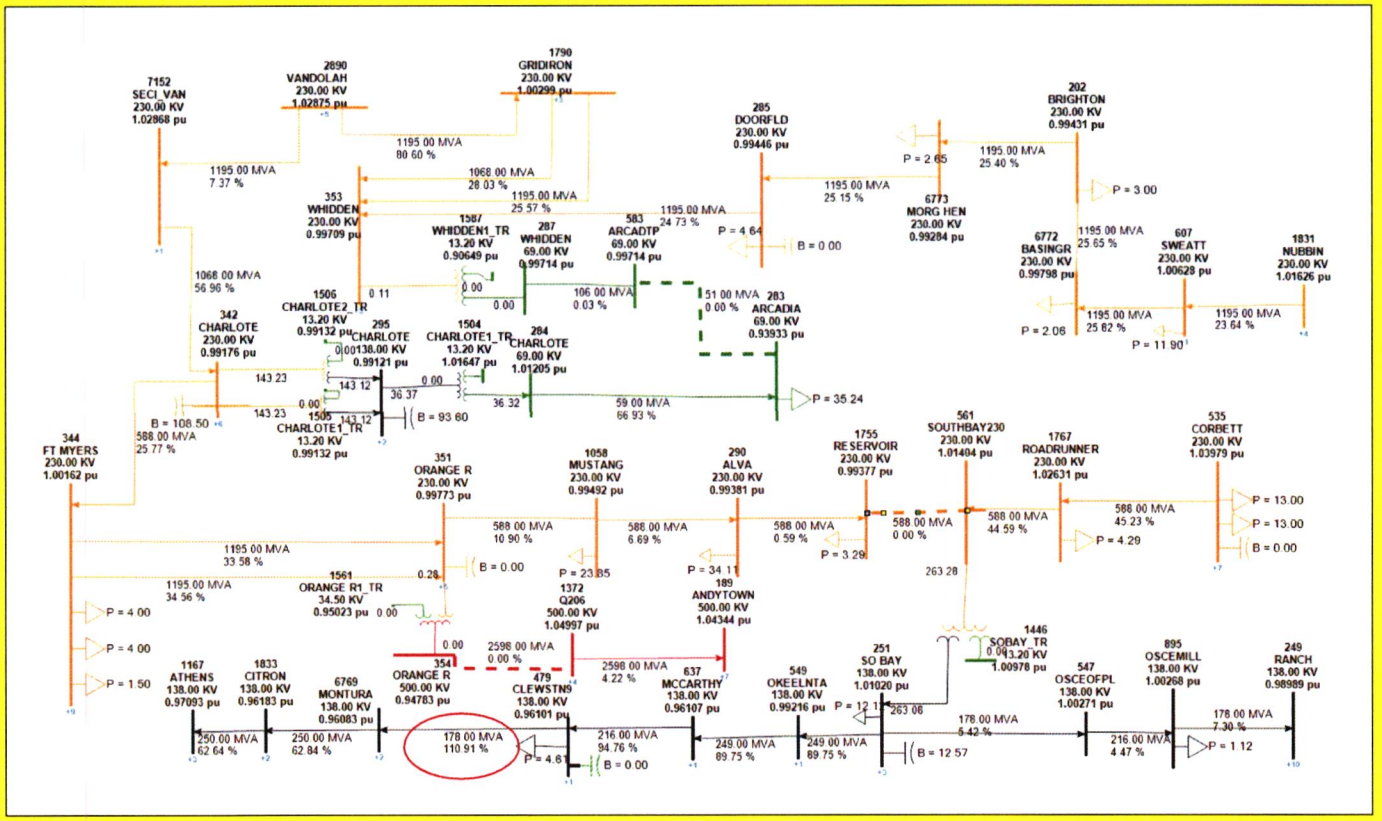
Base Case / Contingency:
South Bay-Reservoir 230kV + Orange River-Ghost 500kV
Branch Overload: Clewiston-Montura 138kV – 127%

Legend
500kV
230kV
138kV
69kV



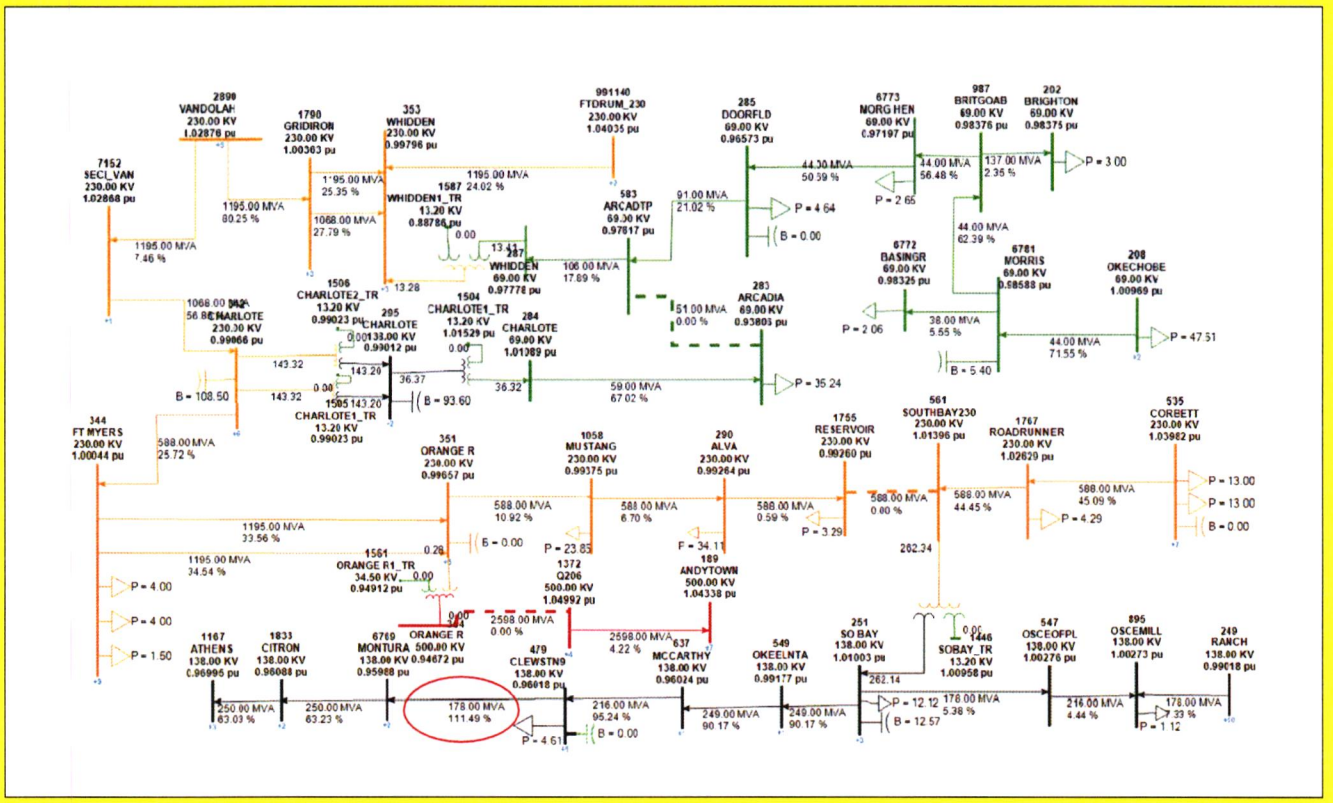
Project / Contingency:
South Bay-Reservoir 230kV + Orange River-Ghost 500kV
Branch Overload: Clewiston-Montura 138kV – 111%

Legend
500kV
230kV
138kV
69kV



Alt I / Contingency:
South Bay-Reservoir 230kV + Orange River-Ghost 500kV
Branch Overload: Clewiston-Montura 138kV – 111%

Legend
500kV
230kV
138kV
69kV



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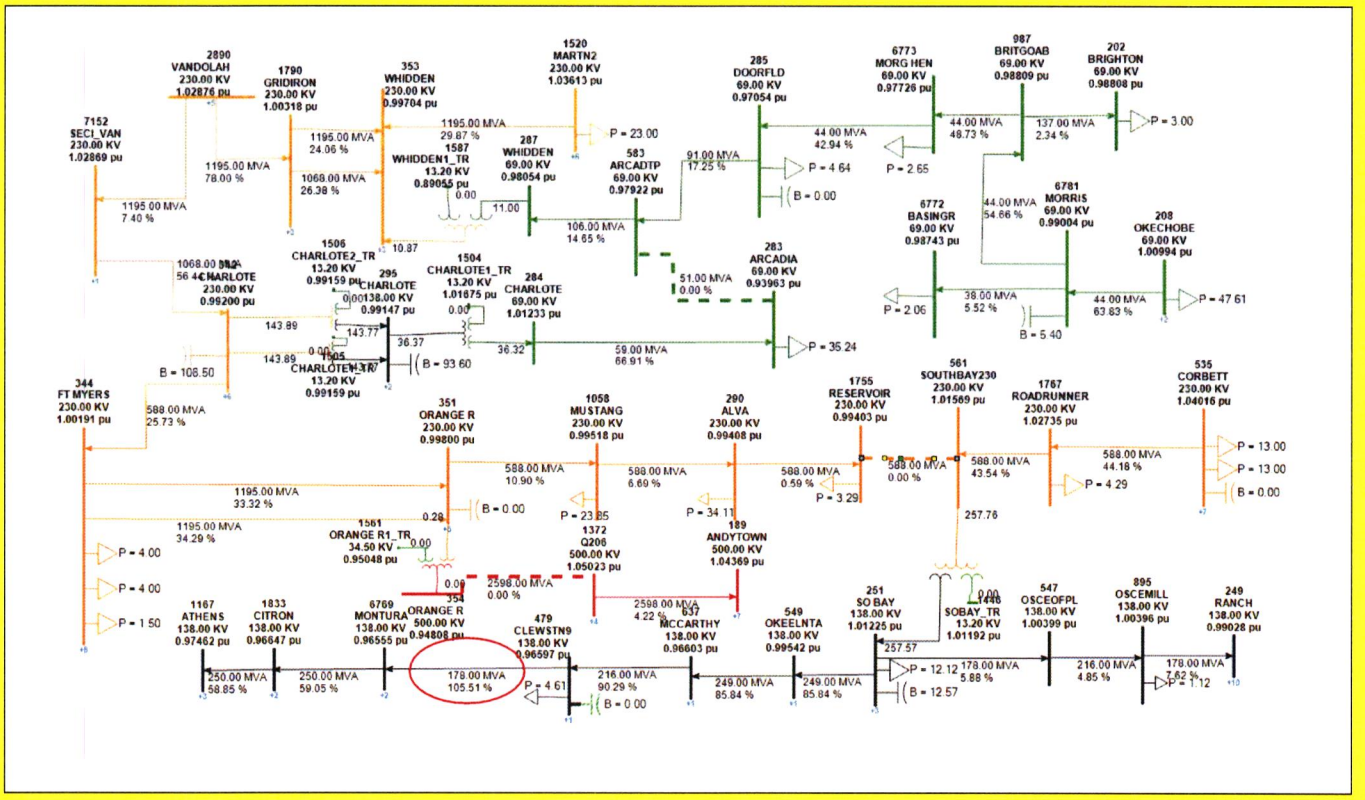
Alt II / Contingency:
South Bay-Reservoir 230kV + Orange River-Ghost 500kV
Branch Overload: Clewiston-Montura 138kV – 106%

Legend
500kV
230kV
138kV
69kV



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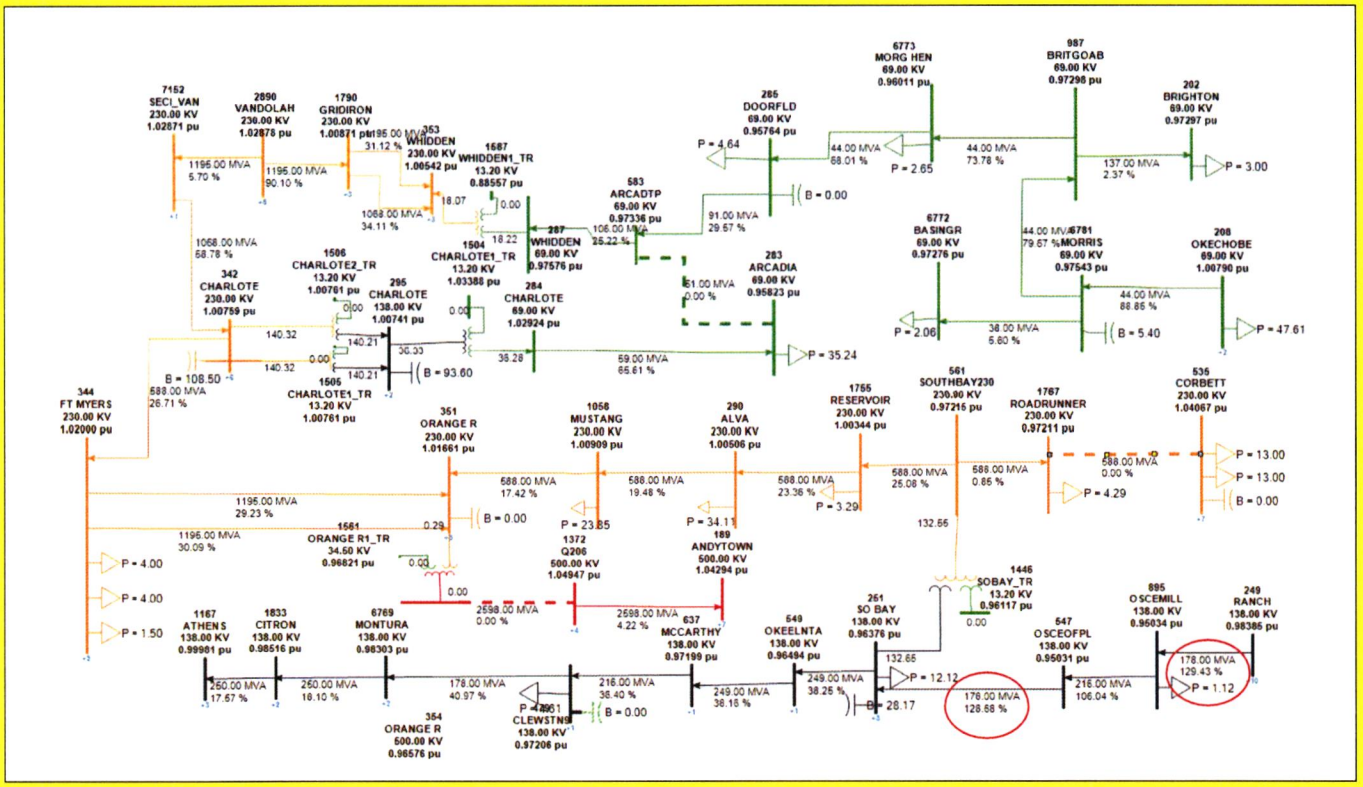
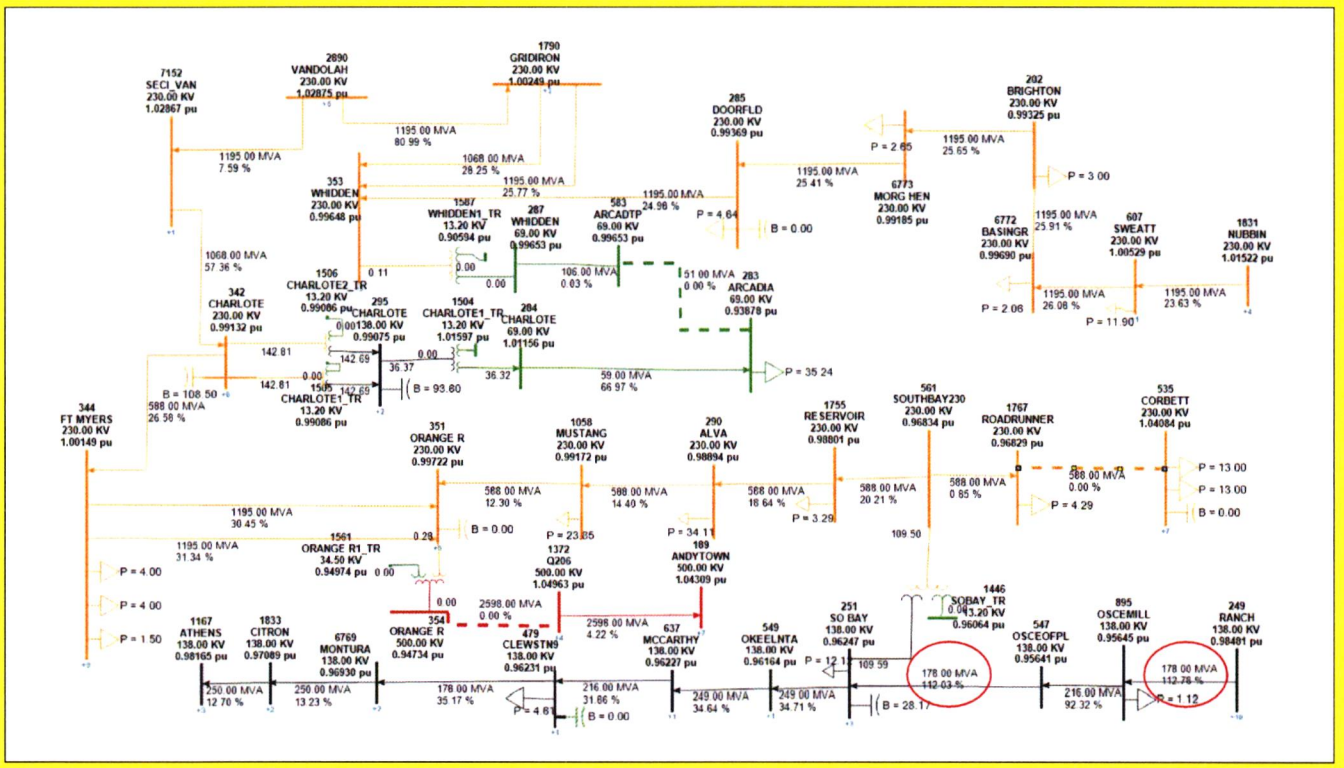
Base Case / Contingency:
Corbett-Roadrunner 230kV+ Orange River-Ghost 500kV
Branch Overloads: Ranch-Oscemill 138kV – 130%
South Bay-Osceola 138kV – 129%

Legend
500kV
230kV
138kV
69kV

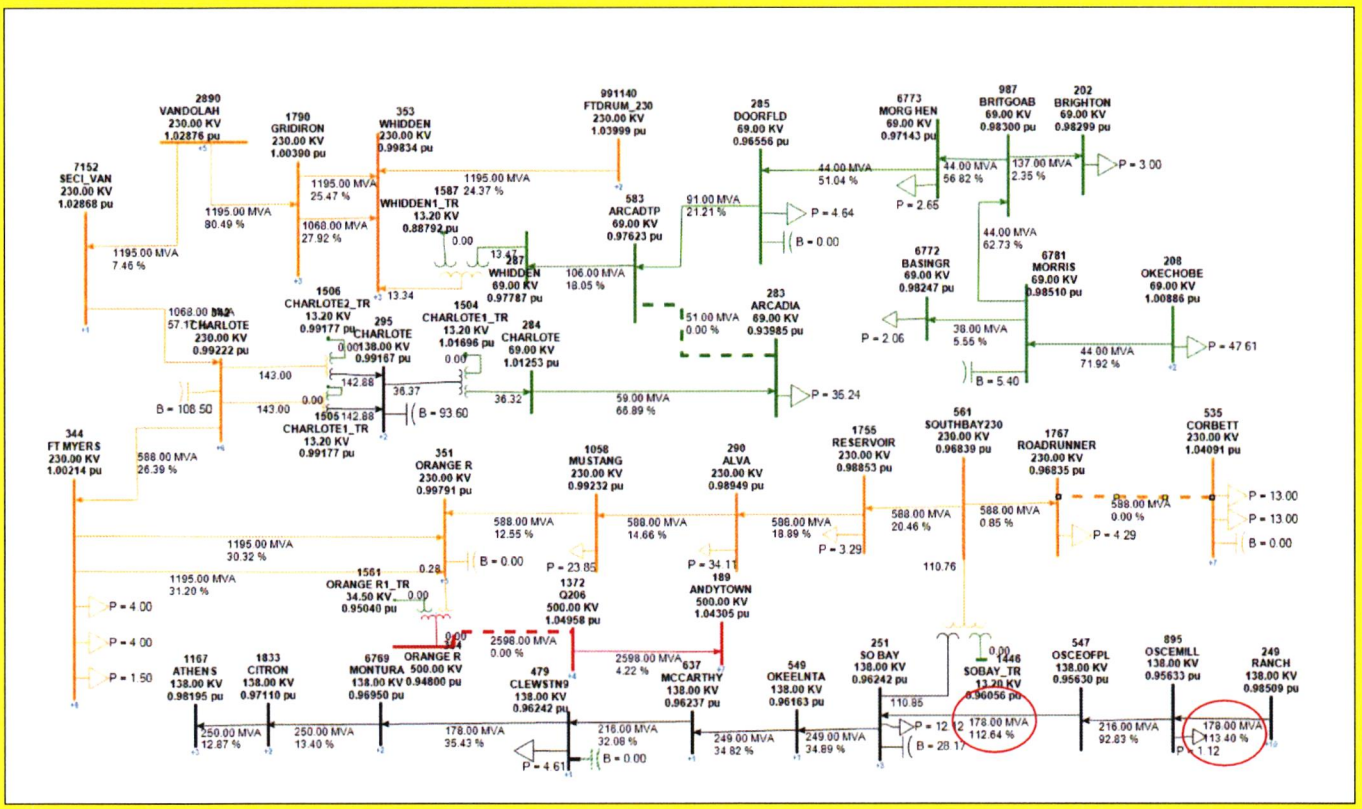


Project / Contingency:
Corbett-Roadrunner 230kV + Orange River-Ghost 500kV
Branch Overloads: Ranch-Oscemill 138kV – 113%
South Bay-Osceola 138kV – 112%

Legend
500kV
230kV
138kV
69kV



Alt I / Contingency:
Corbett-Roadrunner 230kV + Orange River-Ghost 500kV
Branch Overloads: Ranch-Oscemill 138kV – 113%
South Bay-Osceola 138kV – 113%



Alt II / Contingency:
Corbett-Roadrunner 230kV + Orange River-Ghost 500kV
Branch Overloads: Ranch-Oscemill 138kV – 107%
South Bay-Osceola 138kV – 107%

Legend
500kV
230kV
138kV
69kV