





	IEEE/PES Substation Committee - GIS Subcommittee Applications Reference Projects							
	Projects	Country	City	Year	Data	Special		
Art All	Schluchsee	Germany		1976	Tuppel laid	First SF ₂ installation		
	Palexpo	Switzerland	Geneva	2001	Tunnel laid 2 nd generation	First No/SEe installation		
	Joshua Falls	USA	Lynchburg VA	1978	Directly buried	First buried installation		
a state a state of	Baxter Wilson PP	USA	Mississippi	2001	Above ground	Water		
	PP9	Saudi Arabia	near Rivadh		Above ground	Desert installation		
A STORAGE	Hams Hall	England	West Midlands		Above ground 2 nd generation	Mixed installation		
SF6								

			IEEE/PES S	ubstation Committee - GIS Subcommittee					
	Applications Schluchsee								
	Schluchsee, Germany								
	۲	Ratings							
		U _r	420 kV						
		l _r	2500 A						
		U _{BIL}	1640 kV						
		l _s	53 kA						
SFB	•	Single line, GIL laid in a Connectior	physical ar a tunnel thro of cavern p	rangement ough a mountain oower plant to the overhead line					
	T&D	Chicago GIL			- 5 -				





	IEEE/PES Substation Committee - GIS Subcommittee							
	Aj P/	pplicatior ALEXPO	is N ₂ /SF ₆ Ty	pe	~			
	۲	PALEXPO	Switzerland	d				
統版	۲	Ratings						
		U _r	300 kV					
meast.		l _r	2000 A					
		U _{BIL}	850 kV					
		l _s	50 ka					
SF6	۲	2 circuits to	otaling 3680	meters using N_2/SF_6 gas mixture.				
	The station was installed in 2001 and remains in service today.							
	T&D) Chicago GIL			- 8 -			









	IEEE/PES Substation Committee - GIS Subcommittee										
	Applications Baxter Wilson Power Plant										
CALL C	Entergy - Baxter Wilson Power Plant, Mississippi										
	۲	Installed in 2001									
	٠	Ratings									
		U _r	550 kV								
		l _r	4500 A								
黑灰肥叶小		U _{BIL}	1550 kV								
SF6		U _{SIL}	1175 kV								
		l _s	63 kA/3 s (80 kA capable)								
		A single cir	cuit GIL with SF ₆ /air bushings at each end of the line								
	 Total length – 1250 m 										
	T&D	Chicago GIL		- 13 -							













	IEEE/PES Substation Committee - GIS Subcommittee					
	Applications Hams Hall	Y				
	Use of mixture of nitrogen and SF ₆ (80/20).					
	 Special care to internal cleanliness by: Low wear contacts Use of particle traps around contacts and in the enclosures No other friction between parts 					
SF6	Conical insulators with long creepage distance for contact support and volume partitioning.					
	Connection between enclosures by welding on site.	ł				
	Gas monitoring and internal arc location by electronic system using digital serial connections measurement.					
	UHF sensors for partial discharge measurement.	- 20 -				
and the - Cart						



	IEEE/PES Substation Committee - GIS Subcommittee Applications Type of Layout						
	Typicals	Country	City	Vear	Туре	Special	
the MI	Vertical GII	Namihia	Windhoek	1977	245 kV 800 m	opoolai	
	Tunnel	India	Nathpa Jhakri	1011	550/420 kV		
the states by 2	Above Ground	Canada	Bowmanville	1987	550/420/245 kV		
	Bridges				362 kV		
	Power Plant				550 kV		
A State of the second second	Transformer				550 kV		
THE MOUNT AND A STATE	Connection						
The state of the s	Trench				550 kV		
	GIS Connection				550/420 kV		
	Directly Buried				420 kV		
	Overhead Line Connection	Switzerland	Geneva	2001	550/300 kV		
SF6							
77	GIL						- 22 -































